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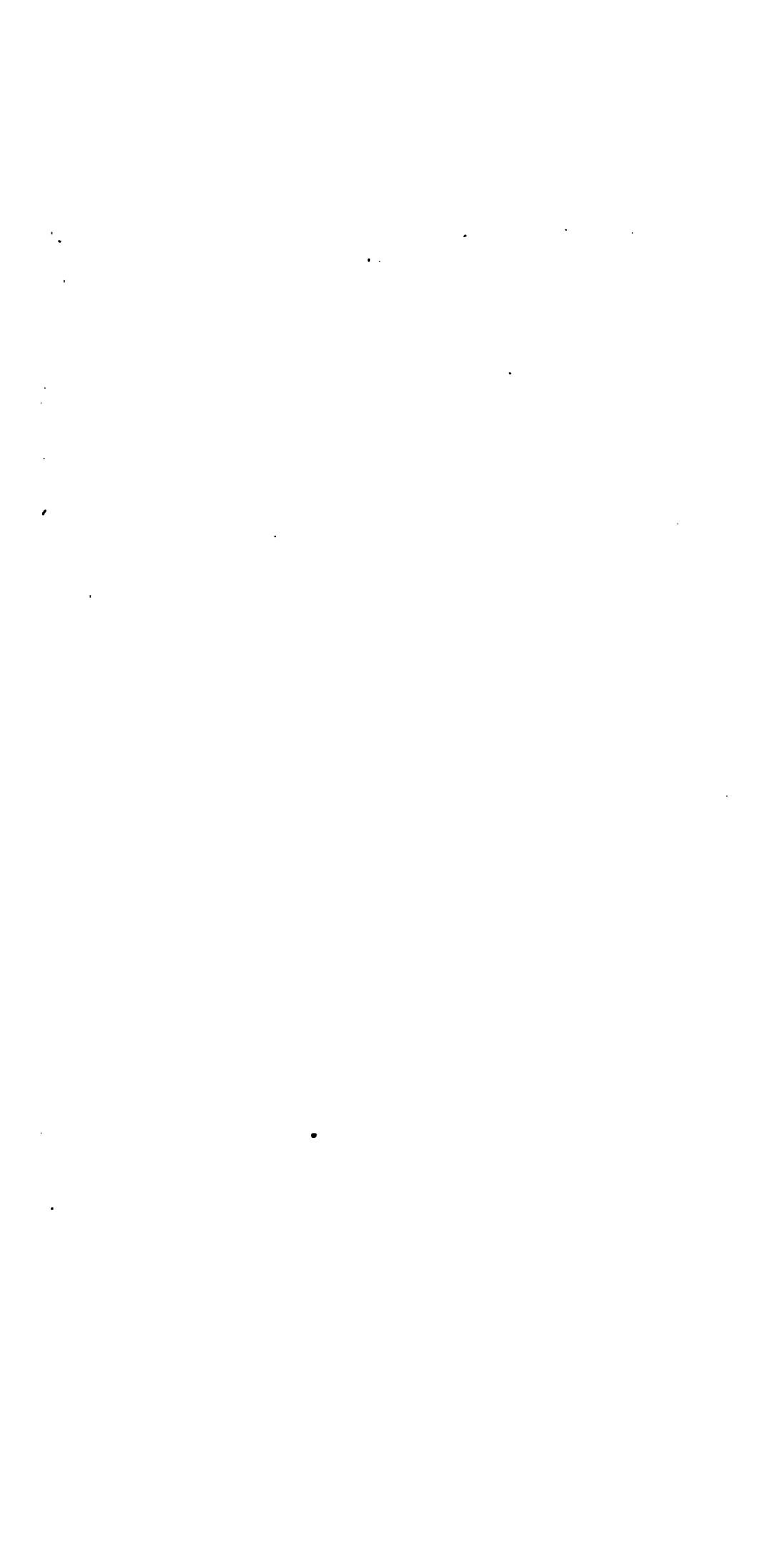




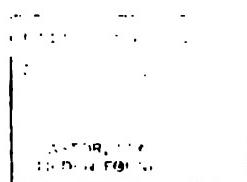


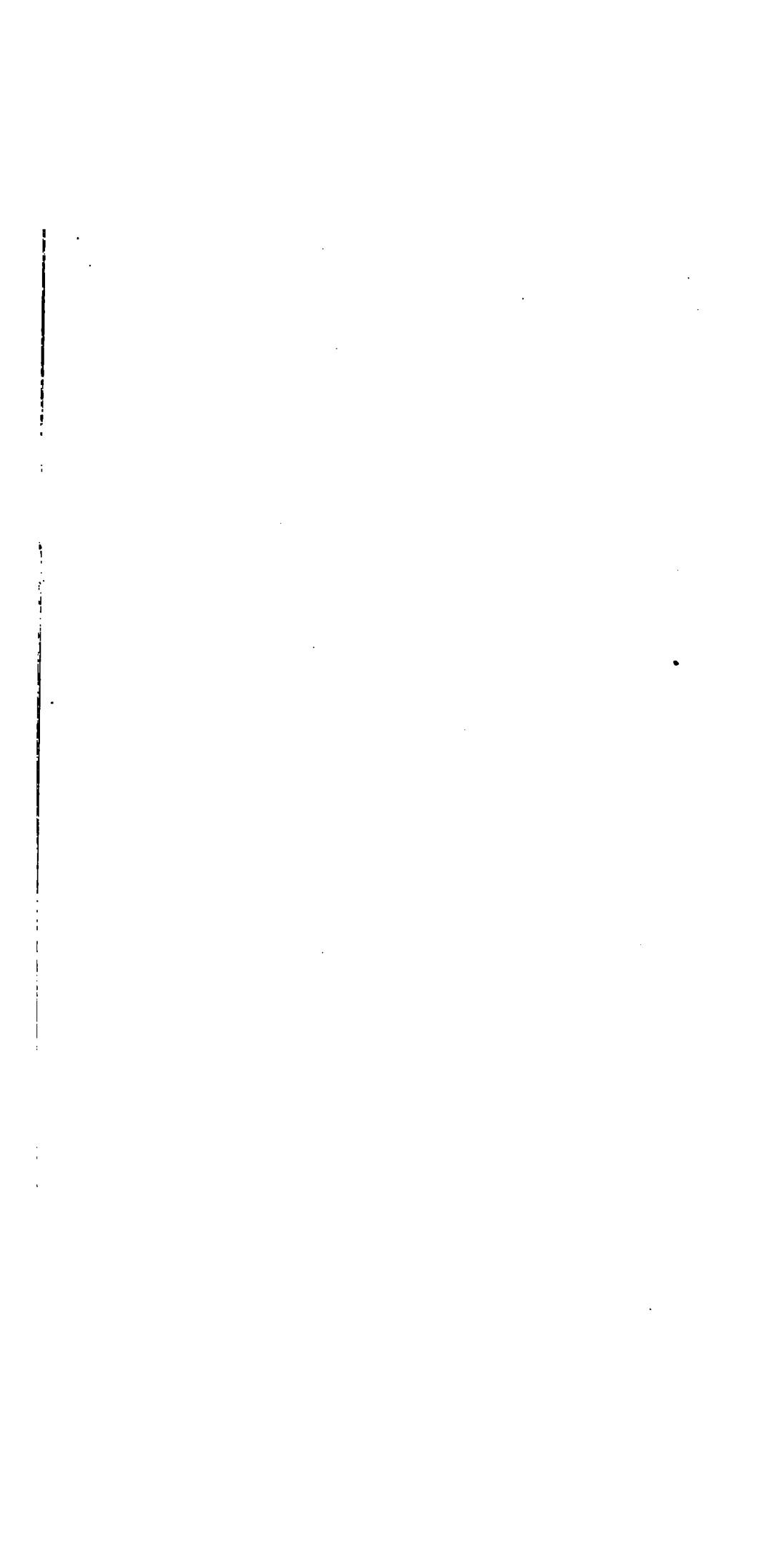






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EXTERIOR OF THE BUILDING, 1892.

HISTORY
OF THE
MASTER BUILDERS' EXCHANGE
OF THE
CITY OF PHILADELPHIA

FROM ITS ORGANIZATION IN THE YEAR

1886 TO 1893.

Compiled for the Historical Committee of the Exchange

BY

CLEM. H. CONGDON.

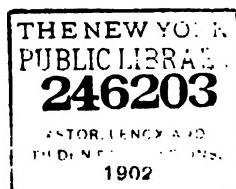
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MASTER BUILDERS' EXCHANGE
OF THE
CITY OF PHILADELPHIA.

MASTER BUILDERS
EXCHANGE
CITY OF PHILADELPHIA

PREFACE.

THE fact that the Master Builders' Exchange of Philadelphia is now regarded as one of the foremost institutions of the kind in the country, in addition to the important place it occupies in the business community of Philadelphia, has suggested the advisability of preparing this volume while the facts incident to the organization of the Exchange are fresh in the memories of those active in its formation. The following pages tell of the inception of the Exchange; the purposes for which it was formed; its early struggles for a conspicuous place before the public and the prominent part taken by its representatives in the proceedings of the National Association of Builders. In coming years it will be the duty of the Historical Committee to compile the succeeding chapters to this, the first History of the Master Builders' Exchange of the City of Philadelphia.

DEDICATED
TO
COL. RICHARD T. AUCHMUTY
OF
NEW YORK

In recognition of his generosity and practical
interest in the

MASTER BUILDERS'
MECHANICAL TRADE SCHOOLS

OF
PHILADELPHIA.

ILLUSTRATIONS.

ILLUSTRATIONS.

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HISTORY
OF THE
MASTER BUILDERS' EXCHANGE
OF PHILADELPHIA.



HISTORY
OF THE
MASTER BUILDERS' EXCHANGE
OF PHILADELPHIA.

I.

The Master Builders' Exchange of Philadelphia was first conceived by Mr. Charles H. Reeves, a prominent member of the Master Plasterers' Company of Philadelphia, at a time when the building interests of the city were endangered by labor troubles and unbusiness-like competition.

He outlined to a few prominent mechanics, in a general way, the kind of organization needed to remedy existing evils, and to cope with prospective difficulties in the building trade. Receiving much encouragement, he decided to present his plan to the Master Plasterers' Association for its consideration. Mr. William H. Albertson, another active member of that organization, agreed to support Mr. Reeves in any move tending to establish an association on the proposed lines, and it was partially due to his

suggestion that the matter was broached at the meeting of the Master Plasterers' Company on June 7, 1886.

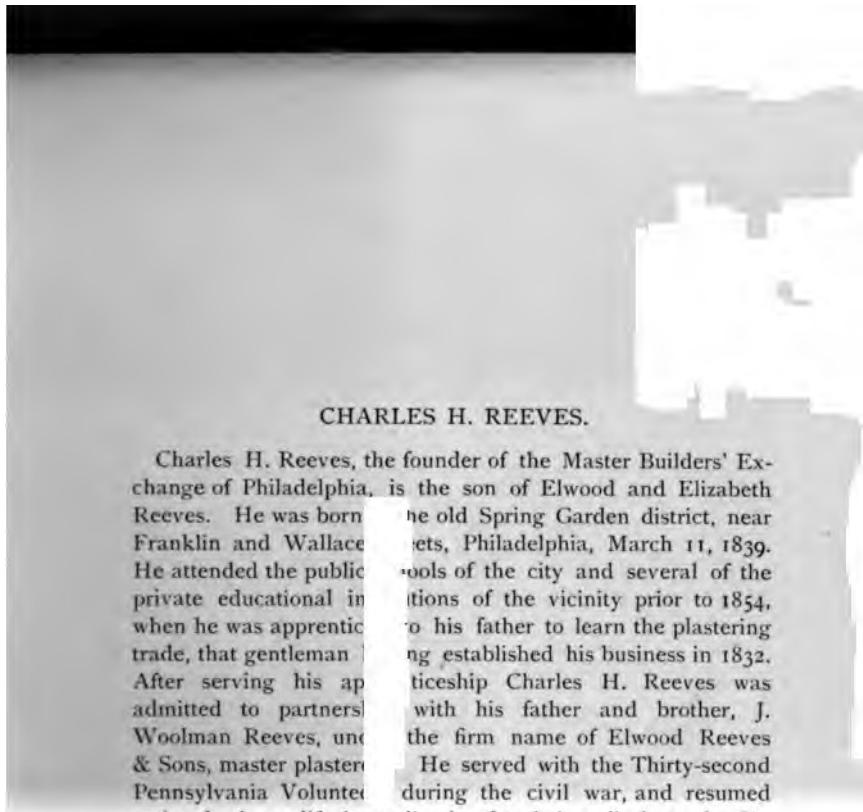
In presenting his idea of the organization needed, Mr. Reeves said :

“MR. PRESIDENT:—For over one hundred years trades organizations have prospered in Philadelphia. It was one of these—the Carpenters' Company—that gave shelter to the first Continental Congress on September 4, 1774, and it is proper, if not absolutely necessary, that the members of that company, this company, and every similar organization, unite under one common banner for the benefit of the building trade. The journeymen have concentrated their organizations and are gaining in strength and importance every day. The master mechanics, as a class, have no central body to meet with or deal with them. Such an organization will be needed sooner or later, if it is not now. More than this, gentlemen, the employing mechanic of a great city has a place in society. His knowledge, his capital and his business standing give to him that right, and but few have acquired it. By forming an organization such as I propose a conspicuous place will present itself, and moreover we will be benefited by the strength of unity. The





CHARLES H. REEVES,
TREASURER.



CHARLES H. REEVES.

Charles H. Reeves, the founder of the Master Builders' Exchange of Philadelphia, is the son of Elwood and Elizabeth Reeves. He was born in the old Spring Garden district, near Franklin and Wallace Streets, Philadelphia, March 11, 1839. He attended the public schools of the city and several of the institutions of the vicinity prior to 1854, when he was apprenticed to his father to learn the plastering trade, that gentleman having established his business in 1832. After serving his apprenticeship Charles H. Reeves was admitted to partnership with his father and brother, J. Woolman Reeves, under the firm name of Elwood Reeves & Sons, master plasterers. Pennsylvania Volunteered during the civil war, and resumed active business life immediately after being discharged. He joined the Master Plasterers' Company in 1864; Phoenix Lodge No. 130, Free and Accepted Masons, in 1871, and has been treasurer of Delphi Senate, Order of Sparta, since its organization. He is also Treasurer of the Master Builders' Exchange of Philadelphia, and of the Master Plasterers' Company.

His venerable father died in 1871, and the firm name was changed to J. W. & C. H. Reeves. The business of this firm has been uniformly large and of the most intricate and elaborate description, they having planned and executed, among other notable operations, the United States Supreme Court room in the City Hall, as well as other of the more artistic rooms in that great building; the bank of Drexel & Co.; the Northern Liberties, Tradesmen's, National Security, Manufacturers', and other large bank buildings; Swarthmore College; Westtown Friends' School; Lehigh University; some of the Centennial buildings, and many of the most magnificent private residences in and about the city.

Mr. Reeves attended the Conventions of the National Association of Builders held at Boston in 1886 and at Chicago in 1887.

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associations surrounding such an organization will prove beneficial to all. A general meeting place should be provided where each member can transact business quite as well as in his own office. Desks, stationery, books of reference, newspapers, magazines and conveniences of all kinds should be placed at the disposal of members. Private rooms for confidential meetings between members should be provided, committees should be appointed to consider plans to elevate the building trades and the social standing of mechanics in general, and to bring about better business methods. It will require but little effort on our part to establish such an institution and to make it a glorious success when started.

“I have conferred with representatives of nearly every branch of the building trade, but find none of them willing to take the initiative. We can, and I trust we will, do it.

“Employing mechanics cannot afford to longer remain at the mercy of associations organized to fight them, and I therefore move that a committee of three members of the Master Plasterers’ Company be appointed to confer with all the interests represented in the building trade of Philadelphia as to the advisability of forming an association or exchange, which shall have for

its object the advancement and protection of the building trade and kindred industries."

True to his pledge, Mr. Albertson seconded the motion, saying that such a project appealed to the better judgment of all well-meaning business men, and that there could be little doubt as to the ultimate success of the enterprise.

President James T. Allen took the floor and advocated the adoption of the resolution, saying that the time to act had arrived and that he was glad to know that men capable of carrying out the project had interested themselves in it, and expressed the hope that not one dissenting vote would be recorded. The resolution was unanimously adopted, and at the request of the members present Mr. Allen appointed himself, Charles H. Reeves and William H. Albertson as a committee to take the matter in charge. George S. James said that the committee would certainly incur some expense and it was only right that the Company should provide the money. He put his suggestion in the form of a motion authorizing the committee to draw upon the Company for any funds needed, which motion was also unanimously passed.

With a firm determination to effect an organization promptly the committee met on June 11, 1886, at Mr. Allen's office, No. 212 South Tenth

Exhibit 1





JAMES T. ALLEN,
PRESIDENT MASTER PLASTERERS' ASSOCIATION, 1886.

JAMES T. ALLEN.

It was James T. Allen, President of the Master Plasterers' Company, who entertained the motion of Charles H. Reeves, before a meeting of that body, which resulted in the formation of the Master Builders' Exchange of Philadelphia. It was he who, by unanimous request of those present, was made the third member of the committee appointed by the Company over which he presided to promote the scheme of establishing the Builders' Exchange in this city, and to him belongs much credit for the efficient work of that committee. Mr. Allen was born on May 24, 1819, in Philadelphia. He was educated at private schools until he was apprenticed to learn the trade of plastering with his father, James Allen, who established himself in the plastering business early in 1819, and in 1844 James T. Allen was admitted to partnership. The elder Mr. Allen retired in 1855, and his son, Thomas Allen, was taken into partnership with James T. Allen, the firm name being Allen & Bro. Thomas Allen retired in 1860, and until the admission of J. Turley Allen, his son, James T. Allen conducted the extensive business individually. Mr. Allen served with credit in the Reserve Brigade of the Third Regiment during the late war. He joined the Masonic fraternity in 1853. In 1845 he became a member of the Master Plasterers' Association, and was elected to the Presidency of that organization in 1881.

street. Here the scheme was talked over and new ideas were suggested and noted. Before an hour had elapsed the gentlemen realized for the first time that they had undertaken to establish an organization that would be more powerful and far reaching in its influence than any similar association then in existence in Philadelphia. It then occurred to them for the first time that the well being of a multitude would be affected by their work; that thousands of bread winners would be concerned in it; that either much good or great harm would result from their labors, and it was then and there that the real policy of the proposed organization was outlined. After much discussion it was agreed to send copies of the following circular letter to representative men in each branch of the building trade :

Philadelphia, Pa., June 11, 1886.

DEAR SIR:

At a meeting of the Master Plasterers' Company of Philadelphia, held at Early's Hall, No. 1321 Arch street, Philadelphia, Pa., on June 7, 1886, a committee of three was appointed to take action as to the feasibility of forming an organization composed of all branches of the building trades.

If you have an organization in your branch of the business will you kindly bring it before the next meeting and have a committee of three appointed to meet with us at some future time and place to be agreed upon, at such time as the other organizations are heard from?

Respectfully yours,

CHARLES H. REEVES,

WILLIAM H. ALBERTSON,

JAMES T. ALLEN,

Committee.

Mr. Albertson was selected to conduct all the correspondence for the committee, while Messrs. Reeves and Allen agreed to canvass their friends personally in the interest of the movement.

Mr. Albertson wrote to the officers of every organization of master mechanics in the United States, asking them to send him copies of their by-laws, constitution, and other data concerning their associations. These gentlemen not only sent the desired publications, but wrote him letters recounting the obstacles they had encountered, and suggesting new plans for consideration. All these papers and letters were carefully read and preserved.

During the interim between the day the circular letter was issued and September 6.

[REDACTED]



WILLIAM H. ALBERTSON,
FIRST VICE-PRESIDENT, 1892.

WILLIAM H. ALBERTSON.

William H. Albertson, one of the original organizers of the Master Builders' Exchange of Philadelphia, was born in Philadelphia lying west of the Schuylkill River. His father, James Albertson, was coachmaker of some prominence, and educated his son at the public schools of the city. William H. Albertson served his apprenticeship at plastering with Messrs. Campbell & Ford, and afterwards with John W. Crosby, who moved to St. Paul, Minn., just four months before the latter attained his majority. In 1861 Mr. Albertson went to Memphis, Tenn., where he established himself in business for the first time, doing journey work during dull periods. When the war broke out he returned to Pennsylvania and enlisted in the Twenty-third Pennsylvania Volunteers, served three years, and commenced business anew in Philadelphia at the time of the great plasterers' strike, 1865-66, when almost any price could be obtained by employing plasterers who could fulfil contracts. This was a singularly fortunate occurrence for Mr. Albertson, who conceded the advance asked by the journeymen, and at once secured a profitable line of trade, which he has retained even up to to-day.

In 1866 he joined the Master Plasterers' Company of Philadelphia, of which he is now Vice-President. He joined Hamilton Lodge, No. 54, Free and Accepted Masons, in 1877, and has been closely identified with many organizations of a local character for over twenty-five years. He was the first Secretary of the Master Builders' Exchange, and is now President of the Quaker City Mortar Company.

1886, the date upon which the first meeting of the gentlemen who were to form the association was held at No. 1321 Arch street, Mr. Albertson had been approached by no less than one hundred persons connected with the building trade, who expressed not only a willingness to join the proposed organization, but an urgent desire. The same encouragement was given Messrs. Reeves and Allen, and it was with much pleasure that they issued the call for the first meeting. Prompt action was again demanded, and as soon as the meeting was called to order David A. Woelpper, who presided, appointed Stacy Reeves, carpenter; George W. Roydhouse, bricklayer, and Fred F. Myhlertz, stone dealer, to draft a series of resolutions expressing the objects of the proposed organization.

After some deliberation, the following resolution was prepared and finally adopted :

Resolved, That we, the committees appointed by our several organizations, agree to recommend to our different associations the necessity of forming an organization embracing all the branches of the building trade, master mechanics, and material men, for our mutual benefit and protection. Said organization to be known as the Master Builders' Exchange of the city and county of Philadelphia.

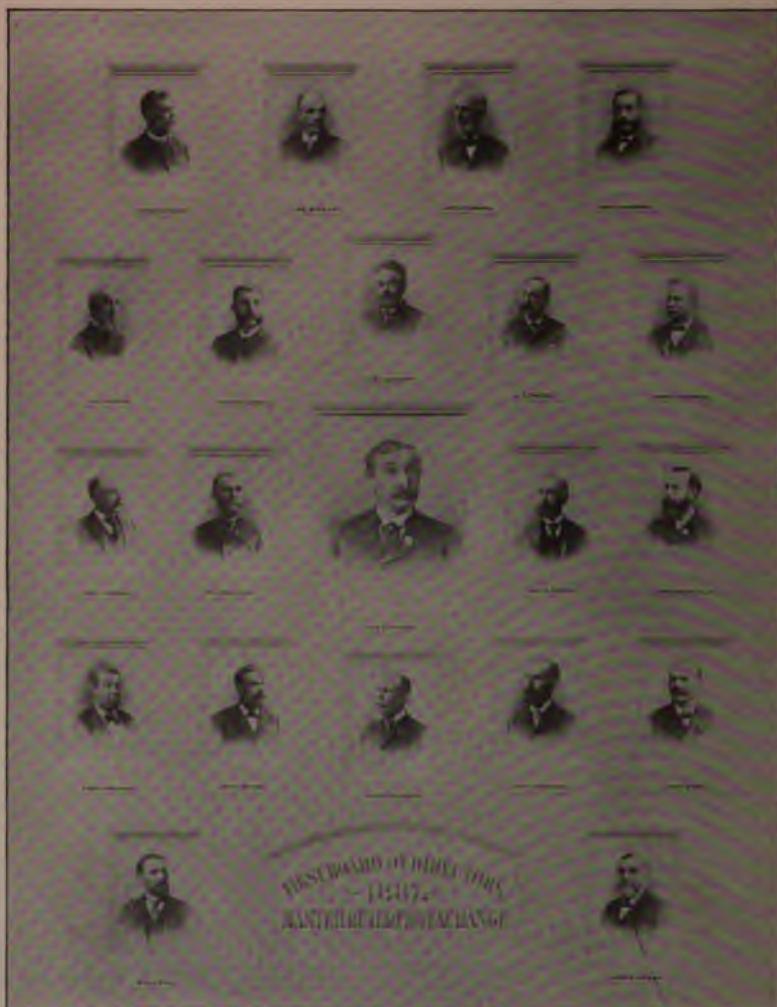
This resolution was signed by David A. Woelpper, lumberman; Michael Magee, brick-

layer ; Hugh Copeland, stonecutter ; William B. Carlisle, painter and decorator ; James T. Allen, plasterer ; William Smith, bricklayer ; Samuel Lloyd, lumberman ; Fred F. Myhlertz, stone dealer ; Miles King, bricklayer ; Charles H. Reeves, plasterer ; Stacy Reeves, carpenter ; George W. Roydhouse, bricklayer ; Charles C. Carman, carpenter ; David McMaster, stonecutter ; and John Gillespie, brick manufacturer. After electing Charles H. Reeves treasurer, the meeting adjourned to meet at 8 o'clock on October 13, 1886.

The necessity of drafting a constitution to govern the Exchange was discussed at the meeting on October 13, and the following committee was appointed to prepare a rough draft of the same for the consideration of the association : Stacy Reeves, Charles H. Reeves, Joseph Chapman, Fred F. Myhlertz, Jacob Dowler, George W. Roydhouse, and William Harkness, Jr. It was decided at the meeting of this committee, held on October 18, 1886, to procure a charter.

The first formal meeting of the Exchange proper was held on November 2, 1886, at the rooms of the Master Plumbers' Association, No. 141 North Seventh street. The following gentlemen were present : David A. Woelpper,

— 4 —



Stacy Reeves, William Smith, W. H. Aman, Jacob Dowler, George W. Roydhouse, Miles King, Charles H. Reeves, James T. Allen, Joseph Chapman, William Harkness, Jr., John F. Huneker, Fred F. Myhlertz, Hugh Copeland, John Byrd, William McBride, Peter Carrigan, A. P. Shannon, J. S. Thorn and William H. Albertson.

On December 17, 1886, a committee was appointed to select nominees for directors and to employ a lawyer to draft a charter and attend to such other legal matters as might present themselves. The committee acted promptly, and on December 28 the following Board of Directors was elected: For one year—**Miles King, Charles H. Reeves, David A. Woelpper, Peter Carrigan, William Harkness, Jr., William Nice, Jr., and Hugh Copeland.** For two years—**Stacy Reeves, George Watson, George W. Roydhouse, William H. Albertson, J. Stein Thorn, Alfred P. Shannon and Fred F. Myhlertz.** For three years—**John Byrd, John S. Stevens, Samuel J. Creswell, Joseph Chapman, John F. Huneker, John E. Eyanson and Murrell Dobbins.** Mr. Nice was unable to fill the position, and Charles Gillingham was elected to fill the vacancy caused by his resignation. This Board of Directors, at its first meeting, elected John S. Stevens Presi-

dent of the Exchange. Up to the time this action was taken David A. Woelpper had presided at every meeting of the organization.

Just about this time a movement was inaugurated by the Master Builders' Association of Boston looking to the organization of a National Association of Builders, and the following letter was received from William H. Sayward, Secretary of the Boston Association, inviting the local body to send representatives to a conference to be held in that city to further the project:

THE MASTER BUILDERS' ASSOCIATION.

Boston, Mass., Dec. 6, 1886.

Some few months ago this Association had the honor of corresponding with associations of a similar character, in various sections of the country, in relation to forming a National Master Builders' Association, and suggested a preliminary conference in this city, to which representatives from the principal associations in some of the larger cities should be invited.

This suggestion met with approval, and representatives to such a conference were promised whenever arrangements could be perfected by us. We now have the pleasure of proposing the 10th, 11th and 12th days of January next as the time of the said conference, and we cordially invite you to send a representative, hoping

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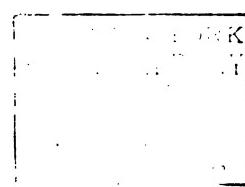
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JOHN S. STEVENS,
PRESIDENT, 1857-1888.

JOHN S. STEVENS.

John S. Stevens, the first President of the Master Builders' Exchange of Philadelphia, was born in Philadelphia, August 13, 1834. He was educated in the public schools of the city and graduated from the Philadelphia High School February, 1850. He learned the business of blacksmithing and building-iron work with his uncle, Mr. John Steward, of the firm of Steward & O'Hara. In 1855 he entered into partnership with his uncle and the firm of Steward & Stevens continued until the death of Mr. Steward in 1881. From a small business the enlargement was rapid, and the firm soon ranked with the largest in that line of business in the country. They contracted for and furnished the iron work for many of the most imposing structures in Philadelphia, among them the Masonic Temple, the new Post Office, Academy of Fine Arts, The Philadelphia Record building and the banking house of Drexel & Co. They also did much of the iron work in the Public Buildings. On January 1, 1887, he admitted his two sons, William W. and R. Steward Stevens, to partnership, and changed the firm name to John S. Stevens & Sons. Mr. Stevens has been identified with every movement looking to the advancement of Philadelphia as a municipality, and is interested in several corporations and financial institutions of the first order. He has been ever willing to aid in the elevation of the American mechanic, and has accomplished much in that direction. He was elected First Vice-President of the National Association of Builders, at the Chicago convention, held in March, 1887, and was elected President of that association at the Cincinnati convention held in 1888. He has traveled extensively through this country and Europe. He sailed from New York on May 8, 1889, for an extended foreign tour. He returned home and was tendered a magnificent reception at the Master Builders' Exchange upon his arrival at Philadelphia on October 7, 1890.



the dates fixed will be convenient and agreeable to you.

We suggest that the conference last through three days, in the hope that we may be permitted to offer some social as well as business civilities to our visitors; and, with this in view, we have also arranged that our Annual Dinner shall take place upon the evening of January 12, at which the delegates will be our honored guests. Kindly inform us at earliest convenience of your acceptance of this invitation, giving us, if possible, the name of the representative you propose to send. We will secure rooms at one of our best hotels for all the delegates, and notify you of the same upon receipt of your acceptance. If possible, please inform us on what day and what hour your representative may be expected here, and we will have a committee at the hotel to greet him, and make him acquainted with others as they arrive.

Should this course not be practicable, we would like to have the gentleman report at our rooms as early as 10 o'clock A. M., Monday, the 10th, where he will find us ready to welcome him.

We hope to receive an early and favorable response.

For the Association,

Wm. H. SAYWARD, *Secretary.*

The invitation was accepted, and John S. Stevens and Charles H. Reeves were authorized to represent the Philadelphia Exchange at the proposed meeting. The committee visited Boston, inspected the Exchange in that city, talked with builders and other business men relative to the Philadelphia Exchange, and returned home delighted with their trip and more enthusiastic than ever over the Exchange in this city, which they recommended should be managed upon the same general plan as the one in Boston, which included daily meetings, active work in public movements, and the establishment of a permanent and popular resort for builders, material men and representatives of allied industries.

At the conference in Boston nine cities were represented, and, after a pleasant and profitable interchange of opinions and experiences, it was decided to issue a call for a convention of builders, to be held in Chicago on Tuesday, March 29, 1887, for the purpose of forming a National Association.

Up to this time all the work accomplished by the local Exchange and its committees was of a rudimentary sort, but all in the line of ultimate usefulness. The roll of members included :

J. W. & C. H. Reeves, William H. Albertson, James T. Allen & Son, David A. Woelpper & Co., Harkness & Brother, John S. Stevens & Sons, Stacy Reeves & Sons, Joseph Chapman, William McCarter, Michael Magee, Hugh Copeland, Jacob Dowler, William H. Aman, Carlisle & Joy, William Smith, Samuel Lloyd, Atkinson & Myhlertz, Miles King, George W. Roydhouse, Charles C. Carman, David McMaster, John Gillespie, Huneker & Son, William J. McBride, William Nice, Jr., Charles Taylor, Alfred P. Shannon & Sons, John Byrd, R. F. Bancroft, Peter Carrigan, William W. Mentzinger, Wm. E. Lindsley, John F. Prince, William T. Wilkins, William J. Shedwick, Washington J. Gear, George Watson, Steinmetz & Boarse, Charles Hinman, James Turner, Charles McCaul, Andrew Diamond, Murrell Dobbins, William Armstrong, Michael B. Andress, Henry R. Coulomb, Franklin M. Harris & Co., Mahlon Fulton & Co., James W. Saunders & Son, Weaver & Pennock, Kister & Orem, John E. Eyanson, Samuel J. Creswell and Thomas Little & Son.

In accordance with a resolution adopted on Oct. 18, 1886, application was made for the following charter, which was granted on Feb. 17, 1887.

CHARTER
OF THE
MASTER BUILDERS' EXCHANGE
OF PHILADELPHIA.

WE, the undersigned, citizens of the Commonwealth of Pennsylvania, having associated ourselves together, with other citizens, as "The Master Builders' Exchange of the City of Philadelphia," are desirous of being incorporated agreeably to the provisions of the Act of the General Assembly of Pennsylvania, entitled "An Act to provide for the incorporation and regulation of certain corporations," approved April 29, 1874, and the supplements thereto.

Therefore declare the following to be the objects, articles and conditions agreeably to which we desire to be incorporated.

First.—The name, style and title of this Corporation shall be "The Master Builders' Exchange of the City of Philadelphia."

Second.—The character and object of this Corporation shall be for the encouragement and protection of the building interests in the city and county of Philadelphia; to inculcate just and equitable principles; establish and maintain uniformity in commercial usages; acquire, preserve and disseminate valuable busi-

ness information, and avoid and adjust, as far as practicable, the controversies and misunderstandings which are apt to arise between individuals engaged in trade, when they have no acknowledged rules to guide them, to the end that membership in this Corporation may be an assurance to the public of skill, honorable reputation and probity.

Third.—This Corporation shall be located and transact all its business in the city of Philadelphia.

Fourth.—This Corporation shall have perpetual succession.

Fifth.—The names and residences of the subscribers are as follows:—

Stacy Reeves, . . . 628 North Sixteenth st.
George Watson, . . . 723 North Eighth st.
George W. Roydhouse, 2007 North College ave.
Miles King, . . . 1513 Fairmount ave.
Charles H. Reeves, . . 922 North Eighth st.
William H. Albertson, 614 North Fortieth st.
David A. Woelpper, . . 426 Franklin st.
William Nice, Jr., . . 433 Christian st.
Hugh Copeland, . . . 2051 Fitzwater st.
Fred F. Myhlertz, . . 730 North Twentieth st.
John S. Stevens, . . 1127 Mt. Vernon st.
Samuel J. Creswell, . . 202 S. Thirty-ninth st.
John Byrd, . . . 1422 Catharine st.

Peter Carrigan, . . .	1523 Wallace st.
J. Stein Thorn, . . .	710 North Sixteenth st.
Joseph Chapman, . . .	1938 North Twelfth st.
John F. Huneker, . . .	1711 Race st.
John E. Eyanson, . . .	207 South Tenth st.
William Harkness, Jr.,	1537 South Ninth st.
Murrell Dobbins, . . .	1825 Green st.
Alfred P. Shannon, . .	1230 Arch st.
Thomas Little, . . .	343 South Twelfth st.
John F. Prince, . . .	669 North Fifteenth st.
Franklin M. Harris,	1820 North Broad st.
Michael B. Andress, .	1206 Wallace st.

Sixth.—The number of Directors shall be twenty-one (21), to consist of one from each trade represented in the Corporation (if practicable), and those chosen for the first year are:

Stacy Reeves, . . .	628 North Sixteenth st.
George Watson, . . .	723 North Eighth st.
George W. Roydhouse,	2007 North College ave.
Miles King, . . .	1513 Fairmount ave.
Charles H. Reeves, .	922 North Eighth st.
William H. Albertson,	614 North Fortieth st.
David A. Woelpper, .	426 Franklin st.
William Nice, Jr., .	433 Christian st.
Hugh Copeland, . . .	2051 Fitzwater st.
Fred F. Myhlertz, .	730 North Twentieth st.
John S. Stevens, . . .	1127 Mt. Vernon st.
Samuel J. Creswell,	202 S. Thirty-ninth st.

John Byrd, . . .	1422 Catharine st.
Peter Carrigan, . . .	1523 Wallace st.
J. Stein Thorn, . . .	710 North Sixteenth st.
Joseph Chapman, . .	1938 North Twelfth st.
John F. Huneker, . .	1711 Race st.
John E. Eyanson, . .	207 South Tenth st.
William Harkness, Jr.,	1537 South Ninth st.
Murrell Dobbins, . .	1825 Green st.
Alfred P. Shannon, . .	1230 Arch st.

Seventh.—The Corporation has no capital stock, and shall have power to make such By-Laws, not in conflict with the laws of this Commonwealth or the laws of the United States, as it may deem suitable for its government, and the same to alter, amend, add to, and repeal at its pleasure; and in its corporate name to have perpetual succession, to sue and be sued, plead and be impleaded, defend and be defended; to purchase or lease such real estate as may be necessary for the purpose of carrying into effect the objects for which it is incorporated, and to enjoy and possess all the privileges and rights conferred upon it by the **said Act of Assembly** and supplements thereto, referred to in the preamble of this instrument.

Eighth.—The business of this Corporation shall be managed by a President, three Vice-Presidents, a Board of Directors, a Clerk or

Secretary, a Treasurer and such other agents and factors as the Corporation may authorize for that purpose.

Witness our hands and seal this thirteenth day of January, in the year of our Lord one thousand eight hundred and eighty-seven (1887).

Before me, the Recorder of Deeds for the county of Philadelphia, personally appeared David A. Woelpper, Stacy Reeves and William Harkness, Jr., above named, and acknowledged the above and foregoing certificate and petition to be their act and deed.

Witness my hand and seal of office this fourteenth day of January, Anno Domini 1887.

[SEAL]

GEORGE G. PIERIE,

Recorder.

In the Court of Common Pleas, No. 1, for the county of Philadelphia, of December term, 1886, No. 324.

And now, this second day of February, Anno Domini 1887, the foregoing Charter of Incorporation having been presented to me, a Law Judge of said county, accompanied by due proof of publication of the notice of this application as required by the Act of Assembly and the rule of this court in such case made and provided, I certify that I have examined and perused the

said writing, and have found the same to be in proper form and within the purposes named in the first class, specified in Section 2 of the Act of General Assembly, entitled "An Act to provide for the incorporation and regulation of certain corporations," approved April 29, 1874, and the supplements thereto, and the same appearing to be lawful and not injurious to the community, I do hereby, on motion of Richard C. Dale, Esq., on behalf of the petitioners, order and direct that the said Charter of the said "The Master Builders' Exchange of the City of Philadelphia," be, and the same is hereby approved, and that upon the recording of the same, and of this Order, the subscribers thereto and the Association shall be a corporation by the name of "The Master Builders' Exchange of the City of Philadelphia," for the purposes and upon the terms therein stated.

[SEAL]

W.M. S. PEIRCE.

Recorded in the office for Recording Deeds in
and for the city and county of Philadelphia, in
Charter-book No. 12, page 74, etc.

Witness my hand and seal of office this seventeenth day of February, 1887.

GEORGE G. PIERIE,

[SEAL]

Recorder of Deeds.

II.

The first annual meeting of the Master Builders' Exchange of Philadelphia was held on January 25, 1887, in the Board of Trade rooms, Mercantile Library building on Tenth street, north of Chestnut, John S. Stevens presiding. The following gentlemen were elected to serve for three years upon the Board of Directors: David A. Woelpper, Charles H. Reeves, Miles King, William Harkness, Jr., Charles Gillingham, Hugh Copeland and Peter Carrigan.

Plans for the management of the Exchange were discussed at considerable length, after which a committee was appointed to secure permanent quarters in the best location available. When the meeting adjourned every participant was thoroughly convinced that the Exchange was now a success beyond peradventure.

The first honorary member elected to the Exchange was Mr. William H. Sayward, of Boston, Mass., afterwards secretary of the National Association of Builders, who visited this city on February 16, 1887, to address a special meeting of the Exchange. He reviewed, in a happy vein, the history of the Exchange which prospered in Boston for a century or more, and assured the Philadelphians that the



WILLIAM H. SAYWARD,
HONORARY MEMBER.



Boston Exchange would lend every assistance in its power to promote the interests of the Master Builders' Exchange of Philadelphia. He pointed out many pitfalls to be avoided, and made numerous suggestions which, later on, proved invaluable to the local Exchange. At this meeting it was reported that sixty-six corporate members had signed the roll, four were yet undecided whether or not to become corporate or non-corporate members, and two enrolled as non-corporate members. Twenty-eight persons who had signified their intention of becoming members were absent.

The subject of organizing a National Association of Builders was also discussed, and the plan as outlined by Mr. Sayward was heartily indorsed. President Stevens announced that the following delegates and alternates had been selected to represent the Exchange at the "First Annual Convention of the National Association of Builders:" Fred F. Myhlertz, Henry R. Coulomb, William Harkness, Jr., George Watson, David A. Woelpper, Charles H. Reeves and John S. Stevens, delegates; William Gray, George W. Roydhouse, William B. Irvine, Stacy Reeves, Charles Gillingham, William H. Albertson and William C. McPherson, alternates. It was also reported that the rotunda of the Philadelphia

Exchange, at Third and Walnut streets had been rented for a term of two years at a rental of \$2000 per annum for the local organization.

The Philadelphians at the conference in Boston took a decidedly active part in the proceedings and Mr. Stevens was selected as one of the committee of five, appointed by the conference, to take in charge the matter of effecting a National Organization of Master Builders.

The First Annual Convention of Builders met at Chicago, on March 29, 1887, and Philadelphia was again honored, Mr. Stevens was elected First Vice-President and William Harkness, Jr., a member of the Board of Directors. Mr. Harkness was selected by Secretary Sayward as an assistant secretary of the meeting, while George Watson, Charles H. Reeves and George Roydhouse were chairmen of various important committees.

The first actual business brought to the notice of the National Association after an organization had been effected was the following series of resolutions offered by Mr. Harkness :

To the President, Officers and Members of the National Association of Master Builders :—

GENTLEMEN:—Whereas, The old system of binding apprentices to the different trades has practically fallen into disuse, and recognizing the fact that the future advancement of the mechanic demands that some action should be taken on the subject, we therefore offer the following resolutions :

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WILLIAM HARKNESS,
SECRETARY.

WILLIAM HARKNESS.

One of the best known and most popular members of the Master Builders' Exchange is William Harkness, who was elected Secretary of the organization on October 2, 1888, and has served in that important position to the present time. He was born in the old district of Moyamensing, March 4, 1837. For some years he attended Ringgold Grammar School, and graduated from the Central High School in July, 1855. For a short time he was in the employ of Price I. Patton, a Market street merchant. During the war he served under Colonel Turner G. Morehead in the Twenty-second Regiment, Pennsylvania Volunteers. Upon returning from the war he engaged in the plumbing business with his brother-in-law. This partnership continued for three years when Mr. Harkness formed a new one, with his brother, under the firm name of Harkness & Bro. He was an active member of the famous Committee of One Hundred, and also secretary of the Citizens' Municipal Association. He is a member of General George G. Meade Post No. 1, Grand Army of the Republic; Lodge No. 9, A. Y. M.; Master Plumbers' Association; Masonic Veterans' Association, and Mechanics' Institute of Southwark. He has for years been a leading spirit in all movements to elevate the standard of local politics but never sought reward. In 1892 George D. McCreary, Treasurer of Philadelphia, named him as one of the Mercantile Appraisers of Philadelphia to serve an unexpired term, it being necessary at that time to nominate men of undoubted ability and sterling integrity. He has recently been reappointed to the same position for a term of three years.

Resolved, That a uniform system of apprenticeship should be adopted by the various mechanical trades.

Resolved, That manual training-schools should be established as a part of the public-school system.

Resolved, That trade night-schools should be organized by the various local trade organizations for the benefit and improvement of apprentices.

These were referred to a committee for consideration and report.

After a brief speech by President-elect Blair, of Cincinnati, Vice-President-elect Stevens was introduced and delivered the following address, which was enthusiastically received:

Mr. Chairman, and Gentlemen of the Convention :—With the well-known modesty of our Quaker City, the City of Brotherly Love (and, as some of my friends have added, now, of sisterly affection) from which I have come, I feel that you have honored our city and not the individual so much, because I feel myself really unworthy of the honor which you have conferred.

In regard to the object that we have had in view in the organization of this National Association of Builders I wish to say a word. Heretofore, gentlemen, we have all felt that the mechanic of our country has not received at the hands of the citizens at large the recognition that he deserved. We feel that it is high time

that the people should know who we are, and what we are, and what we are doing. When I was invited from Philadelphia by our friends in Boston to attend the preliminary conference, and expecting that I might be asked to say something in regard to the city from which I had been sent. I made it my business to ascertain, by an examination of some statistics, what we were doing in the city of Philadelphia. It was something of this kind: By examination of the census of 1880. I found that according to statistics, which are official, that there are in Philadelphia, 146,412 dwelling-houses; that they had an average of $5\frac{7}{100}$ persons to the dwelling. In New Orleans they have 36,347; a percentage of $5\frac{9}{100}$ persons. In Baltimore, 50,833; a percentage of $6\frac{1}{100}$. In San Francisco, 34,110; a percentage of $6\frac{8}{100}$. St. Louis, 43,026; a percentage of $8\frac{1}{100}$. Chicago, 61,069; percentage of $8\frac{2}{100}$. Boston, 43,944; percentage of $8\frac{7}{100}$. Brooklyn, 62,233; percentage of $9\frac{1}{100}$. Cincinnati, 28,017; percentage of $9\frac{1}{100}$. New York, 73,684; percentage of $16\frac{3}{100}$. Now, that is a matter of interest. Then I went to our building inspectors to ascertain what had been done in that line for the last six years. I found by an examination of our records there that there had been 38,084 building operations. 24,672 of

these were dwellings, which, added to the previous number, make a total, at the first of the year, of 171,084 dwellings in Philadelphia. I then inquired as to the value of these operations. I learned there that each one of these comprised a single operation. A large store which we had built, that had cost \$300,000, was considered a single operation. Our churches, our factories, and our storehouses were all single operations, and so on down to the home of the mechanic, costing, possibly, \$1000. And they assured me that \$6000 for each operation would be a fair average. But the figure startled me, and I said, "No, I cannot go away from here with a statement of that kind; I will base it at \$5000." Well, now, \$5000 for each one of these operations, makes a sum of over thirty million dollars each year that is received and expended by and through the mechanics of Philadelphia. Gentlemen, if we spend \$30,000,000 in Philadelphia, what is spent in New York, Boston, Chicago, all over this great country? \$750,000,000 would be a low estimate as to the amount of money that is expended through the mechanics who are represented in the Convention at this time. Think of it! A sum of money that will exceed the amount that is expended in many of our commercial exchanges or boards of trade.

And we want, gentlemen, that the public should know this; we want them to respect us, and we want to respect ourselves.

If these few words will make any of you go home from here feeling that you can lift yourselves up in your manhood, and that when you stand alongside of a professional man, or a storekeeper, or a merchant, that you are part and parcel of the interests of this country that exceed in magnitude that which he represents, it will give you that much more self-respect, and you will receive in accordance as you consider of yourselves.

So much, gentlemen, for the business that we do. Now, I ask you, should not our own dignity and our own self-respect be commensurate with the business that we do? Men who represent the handling and the distribution of this large amount of money should take their proper position before the public. It is with a view to this that we propose to organize in these different cities such Exchanges as have been spoken of. You know, gentlemen, the old adage—and it is a true one—that “In union there is strength.” One individual in a city can accomplish but little; but if they are all united in one common cause success is likely to attend their efforts, and it is for this kind of union

that we meet. The question has been asked by some timid people, "What is going to be your attitude toward the workingman? Do you propose to array yourself in antagonism toward the employes?" I say, No, most emphatically, No! (Applause.)

We want to appeal to the great mass of workingmen—the conservative element of the working-classes—who to-day are led and ruled by a few demagogues, and we want to show them that we, the employers, are their friends and not their enemies. To illustrate, I will simply say that in the city of New York I am informed they have a bricklayers' association, composed of nineteen hundred members, and the average attendance at their meetings for the past year has been less than one hundred. Those one hundred men, the agitators, come there and make laws for the control of the nineteen hundred. Gentlemen, we want to reach the hearts and the sympathies of the eighteen hundred that do not go there, and let *them* assert their power to sit down upon the one hundred agitators, and acknowledge that we are their friends, and that their interests and ours are identical. (Applause.)

I have been asked, "What further do you expect to accomplish by these Exchanges?"

May I map out to you, just briefly, the plans that have been revolving in my own mind, and in the minds of the directors of our Exchange in Philadelphia, where an infant institution was incorporated in the year 1887—so you know we cannot be very old—and we are now fitting up an Exchange-room which we expect to open with proper ceremonies on April 7, in Philadelphia. We expect to have with us probably five or six hundred of the citizens of Philadelphia, besides the architects and builders. When we are well settled it is proposed that we shall send an invitation to the different trade organizations, asking them to send a committee of three or five, as the case may be, to meet us at our Exchange, when our Board of Directors will endeavor to show and explain to them the object of our Exchange, and try then and there to inaugurate a movement that shall prevent, in the future, any strikes; to try and teach them, if we can by moral suasion, that, if they have any wrongs, they should come to us, as a brother-man would go to another, and say, "Let us confer together."

That is what we want to get at in that line. Next, we propose that we shall divide ourselves into committees; we have in our Board, probably ten trades represented; one man from each

will confer with his colleagues in the same branch of business and select a form of specifications, that shall be brief and intelligible to himself and to the rest of them; we then propose to call a committee of the chapter of architects, and submit it to them in order that we may agree, and thus establish something that we have not had in Philadelphia—*uniformity in specifications.* We shall ask for sufficient details previous to making an estimate, so that we will make no mistakes.

Then we have a little scheme in our minds, of this kind: We charge two hundred dollars as membership fees for the corporate members, and we limit them to one hundred, which makes a fund of \$20,000. We limit our non-corporate members to two hundred. They, with the corporate members, each of them, pay fifty dollars per year for the use of our Exchange-rooms, which are intended to be a down-town office, where a man who lives in a remote part of the city can receive his mail and transact his business. Before the expiration of the year we expect to put up a building that shall have, possibly on the first floor, the Master Builders' Exchange National Bank; in the second, the rooms of the Association; adjoining it, a permanent exhibition, as you have here in Chicago. On the

upper floors, architects' offices, while on the top of this building (possibly the 12th, 13th or 14th story), with fast running elevators, we hope to have a dining-room attached, so that a man can come down to that bank, deposit his money (and he will have lots of it), and then he can go up in the Exchange and attend to the business there; up to the architect's office and make another contract; and then up and get his dinner, and down to his business, and all in a couple of hours. Brethren, all go home and do likewise. (Continued applause.)

I forgot to say that I thank you for electing me First Vice-President. (Laughter.)

It was at this convention that the famous "Declaration of Principles" governing all associations identified with the National Association of Builders was adopted as follows:

This Association affirms that absolute personal independence of the individual to work or not to work, to employ or not to employ, is a fundamental principle which should never be questioned or assailed; that upon it depends the security of our whole social fabric and business prosperity, and that employers and workmen should be equally interested in its defense and preservation. While upholding this principle as an essential safeguard for all concerned,

this Association would appeal to employers in the building trades to recognize that there are many opportunities for good in associations of workmen ; and while condemning and opposing improper action upon their part, they should aid and assist them in all just and honorable purposes. That while, upon fundamental principles, it would be useless to confer or arbitrate, there are still many points upon which conferences and arbitration are perfectly right and proper, and that upon such points it is a manifest duty to take advantage of the opportunities afforded by associations to confer together, to the end that strikes, lock-outs, and other disturbances may be prevented. When such conferences are entered into, care should be taken to state clearly, in advance, that this fundamental principle must be maintained, and that such conferences should only be competent to report results in the form of resolutions of recommendation to the individuals composing the various organizations participating, avoiding all forms of dictatorial authority.

That a uniform system of apprenticeship should be adopted by the various mechanical trades.

That manual training-schools should be established as a part of the public-school system, and

that trade night-schools should be organized by the various local trade organizations for the benefit and improvement of apprentices.

The Association recommends all its affiliated associations to secure, as soon as possible, the adoption of a system of payment "by the hour" for all labor performed other than "piece work" or "salary work," and to obtain the co-operation of associations of workmen in this just and equitable arrangement.

That all blank forms of contracts for building should be uniform throughout the United States. That such forms of contract, with the conditions thereof, should be such as will give the builder, as well as the owner, the protection of his rights, such as justice demands. That whenever a proper form has been approved by this Association after consultation with the American Institute of Architects and the Western Association of Architects, we recommend its use by every builder and contractor.

The Legislatures of the various States should be petitioned to formulate and adopt uniform lien laws, and every organization represented in this Association is recommended to use its best endeavors to secure the passage of the same.

Architects and builders should be required to adopt more effectual safeguards in buildings in

process of construction, so as to lessen the danger of injury to workmen and others.

We recommend the adoption of a system of insurance against injuries by accident to workmen in the employ of builders, wherein the employer may participate in the payment of premiums for the benefit of his employes. Also a system securing the payment of annuities to workmen who may become permanently disabled through injuries received by accident or the infirmities of old age."

In due time the Philadelphia delegates and alternates to this convention returned and reported in detail the work accomplished by them in the interest of the Philadelphia Exchange and the National Association of Builders.

The defective laws regulating the erection of buildings in this city were brought to the notice of the Exchange on March 22, by Michael B. Andress, and it was at once decided to take the necessary steps to remedy the evil.

A committee was appointed, of which Mr. Andress was made chairman, to take the matter in charge. Many meetings were held and the subject was thoroughly gone over. It was decided to invite the Board of Building Inspectors and all other organizations identified with the building trade in Philadelphia, and the Under-

writers' Association, to appoint committees to meet with the committee of the Master Builders' Exchange, for the purpose of preparing a bill to be presented to the Legislature, "to better regulate the construction of buildings in the city of Philadelphia." The bill was duly framed, after much deliberation, but has not been presented to the Legislature, because all the builders in the city will not concur in all of its provisions. However, the movement served to place the Exchange on record as favoring better buildings and better methods of construction.

It was on April 7, 1887, that the Exchange at Third and Walnut streets was formally opened. About four hundred master builders, material men and invited guests attended the opening. George Watson called the meeting to order and introduced the President, Mr. John S. Stevens, who made the following address :

GENTLEMEN :—You have been invited to be present at the opening of the "Master Builders' Exchange of the City of Philadelphia," and we certainly feel honored by the distinguished assembly that has here gathered to greet us. I have been asked many questions as to the object we have in view in establishing a Builders' Exchange. I propose to answer them briefly :



FIRST QUARTERS OF THE MASTER BUILDERS' EXCHANGE,
From an Watercolor Sketch by PHILADELPHIA.

The Association is composed of employers in trades that have to do with the construction of buildings. The Exchange is also intended for the use of *material men* and *dealers* in such supplies as we need to purchase, thus bringing the buyer and seller in closer contact.

The object, as defined by our charter, is "for the encouragement and protection of the building interests in the city and county of Philadelphia, to inculcate just and equitable principles, establish and maintain uniformity in commercial usages, acquire, preserve and disseminate valuable information, and avoid and adjust, as far as practicable, the controversies and misunderstandings which are apt to arise between individuals engaged in trade, when they have no acknowledged rules to guide them, to the end that membership in this corporation may be an assurance to the public of skill, honorable reputation and probity."

We have for a long time felt the need of just such an Exchange as we propose this shall be, where, at some stated hour daily, we could be reasonably certain to meet those with whom we are actively engaged in business dealings, to give and receive instructions, to ask and obtain needed information regarding the work in progress, examine plans, give estimates, etc., etc.

Many of us have experienced the difficulty of finding the busy builder, who may have five or six large buildings in progress at one and the same time, and much valuable time has been wasted in chasing each other from building to building, and, while thus engaged, others were in like manner seeking us.

We propose to meet here daily at a specified hour, thus avoiding the difficulties stated, and have, as it were, a central down-town office for the use of all.

The Exchange will be open from 8 A. M. until 5 P. M. The hours for Change will be probably from 11.30 to 1 o'clock, at which time it is expected that the members will meet for business, while special appointments can be made during other business hours.

Each member will have a private box, to which he alone will have access, into which all letters and communications will be placed at each mail delivery.

We have telephone, telegraph and special messenger service always at hand, with an ample supply of business and daily papers, should the busy builder have a few minutes for rest.

Philadelphia is called a slow city; perhaps it is, in some respects. Other cities have had

for years their associations of Master Builders and their Builders' Exchange. Boston, New York, Baltimore, Washington, New Orleans, Chicago, Cincinnati and even the infant city of St. Paul, have been far ahead of us in this respect; but when Philadelphia does move she tries to profit by the experience of others, and we feel confident we have to-day as fine an Exchange, established on as firm a footing, with as many comforts and conveniences, as that of any other city.

And, gentlemen, we do not intend to be content with what we have done. If I am not greatly mistaken, within the next two years we will invite you to view a fine new building, located farther west than this, built expressly for our own uses.

This may to many seem improbable, but I assure you, stranger things have happened.

I think I said Philadelphia was slow to move, but I forgot to say that when she does move it is always to the *front*. So do not be surprised if all, and, possibly more, than we now predict should come to pass.

It gives us especial pleasure to see with us the architects of the city—gentlemen with whom we come into close business relations, and who as a class we have learned to respect and esteem.

I feel certain that the establishment of this Exchange will bring us into still closer and more friendly relations in the future.

Last week in Chicago a convention was held at which some twenty-five of our largest cities were represented and a National Association of Builders was formed. Great interest was manifested, and measures were adopted and plans laid out that cannot help, if faithfully carried out, to improve the status of the builder, and be the means of a better understanding between employer and employes.

We have had printed "The Declaration of Principles," which was thoroughly considered and unanimously adopted by the Chicago convention, which we ask you to read at your leisure.

At the conclusion of Mr. Stevens' address, John Baird, ex-President of the City National Bank, was called upon. He enumerated the many advantages residents of this city have in securing their own homes. Better houses could be built here, he said, and at less cost than elsewhere. It was to the credit of the workingmen in this city, he said, that so many of them owned their own homes. Mr. Baird also gave some recollections of the old Builders' Exchange, in operation in this city many years ago.

James H. Windrim, supervising architect of the United States, was the next speaker. He commended the objects of the new organization and said that it would probably have much to do in the way of improving the relations existing between architects and builders. When builders are well informed, experienced and competent, he said, there is not much trouble in executing the plans of the architects. He suggested that it would be beneficial if specimens of material, sanitary appliances, etc., should be kept at the Exchange rooms, where builders and others could examine them and judge of their merits.

Col. Alexander K. McClure was then introduced by the Chairman. He made an address in which he referred to the Congressional "tinkering at the Eight-hour law," and declared that no political party had been honest enough to be honest with the question of capital and labor. He contrasted Philadelphia, so far as its workingmen are concerned, with Chicago and other cities, and asserted that it was "the only American city upon this continent." "Philadelphia," he said, "has the most intelligent and competent labor of any city in the world, and more workingpeople who own their own homes. Organized labor," he said, "was also more considerate

here than elsewhere, and was entitled to and should have fair dealing at the hands of its employers." He urged that in this respect the Exchange should do its duty, and that one of its chief objects should be to teach labor to respect itself.

"The first duty of organized labor," he said, "should be to encourage individual effort and skill, and to make merit the test of worth." He said "that he had recently had experience with workmen making repairs upon buildings in which he was interested, and could speak regretfully of the incompetence of some of them. If competent workmen were employed and encouraged, and paid according to their merit," he said, "they would probably soon cut loose from workmen who are incompetent." He urged that employes be encouraged by proper remuneration and proper consideration on the part of employers to make their work satisfactory and to cultivate art, gentility and manhood.

When the speeches were over lunch was partaken of.

Several letters of regret were received from prominent people who had been invited to be present and who could not attend, and a congratulatory telegram was received from the Builders' Exchange of Cincinnati.



PREHISTORIC DWELLING - ROCK AND CAVE DWELLERS.
HABITATION OF MAN. PART EIGHTH. 1900.



Two very important matters were decided at the meeting held on June 28, 1887. The first was the adoption of the following resolution :

Resolved, That all members of the Master Builders' Exchange of Philadelphia agree not to sign any contracts unless relieved from forfeiture or demurrage on account of strikes or lockouts

The other was the purchase of the building occupied by the Gas Trust, Nos. 18 to 24 South Seventh street. The German Society of Pennsylvania, which formerly owned the property acquired, was founded in the year 1764 for the relief and protection of German immigrants. Its first president was Henry Keppelle, the grandfather of Michael Keppelle, who was mayor of Philadelphia in 1811.

Soon after its establishment the German Society, with a view of erecting a hall, bought two adjoining lots, of thirty-seven feet each, fronting on Seventh street, between Chestnut and Market streets, the southern in 1765, of John Odenheimer, for one hundred and twenty-five pounds Pennsylvania currency (\$333.33); the other in 1775, of Thomas Asheton for two hundred pounds (\$533.33).

A plan for building the hall was submitted and adopted, contracts were given out and everything was ready for beginning operations, the timber and the bricks being piled upon the

lot, when the Declaration of Independence and the war stopped further progress. This was unfortunate, for during the occupation of Philadelphia the British were not slow in helping themselves to all the material, which they found quite handy for building purposes.

In consequence of this damper the project of building a hall was allowed to rest until 1806. The building then erected was of brick, had two stories and a cellar, and stood free on all sides. It fell back from the line of houses about twenty feet, thus leaving an area in front. It was dedicated on April 9, 1807, upon which occasion the President of the Society, General Peter Muhlenberg, though ailing, took part in the ceremonies. That seems to have been his last official act. He died on October 1 of that year. From the accounts rendered by the Building Committee, it appears that the total cost for the hall and accessories, inclusive of furniture, was \$6959.71.

As only the upper story was required for the uses of the Society, the lower story was rented. The first tenant was Charles Keyser, who kept there a German and English school of good repute, until 1822. From that time until 1833 the College of Pharmacy occupied the lower part of the building. Then followed the

Schuylkill Navigation Company. From 1849 until purchased by the Master Builders' Exchange of Philadelphia it was leased to the city for the use of the Philadelphia Gas Works, which were known as the Gas Trust at the time the lease was executed.

In 1821 two side wings were built and rented out as offices until 1856, when they too were taken by the Trustees of the Gas Works.

The Library of the German Society, which contains one of the finest collections of German books in the United States, was established in 1816. It numbers now upwards of twenty thousand volumes.

The old hall stood until 1866, when it was partly taken down and replaced by a much larger building, which extended over the whole lot. The lower story and the back building were leased to the Gas Trust for a term of twenty years, and at the expiration of that time, June, 1886, to the Department of Public Works, which had, under the provisions of the Bullitt Bill, assumed the management of the gas works, for one year.

The first really great achievement of the new Exchange was the management of the Sixth Division of the civic and industrial display during the Constitutional Centennial in Philadelphia, September 15, 16 and 17, 1887.

All of the arrangements for the formation of this Division were under the auspices of the Master Builders' Exchange, in conjunction with the Building Trades' Council. The exhibit was a systematic and thorough representation of the contrasts in the building trades between the methods in vogue and the materials used one hundred years ago and those employed at the present time. This idea was, however, improved upon by the chairman of the General Committee, Benjamin P. Obdyke, and his conferrees, who, in forming the division, assigned the various branches to positions in the line according to the priority in which they are employed in the construction of a building—viz., from the foundation up. Beginning with the trades, therefore, the stonemasons had the right of the line and the painters and carpenters the left, the other trades falling in the same order as their services would be called to complete a building.

IN MARCHING ORDER.

The Division formed on Berks street, right resting on Broad. The line, when in marching order, was over two miles long, made up as follows:

Neapolitan Band. thirty pieces, Professor F. Curel. leader.

Assistant marshal, John J. Weaver; aids, Robert Paschall, Enoch Remick and John Atkinson, representing the Master Builders' Exchange; A. C. Smith, William H. Thomas and M. D. Kunkle, representing the Building Trades' Council; all mounted.

At the head of the line was carried the banner of the Master Builders' Exchange, a beautiful work in blue and white silk, with battle-axe and spear-head on the ends of the crossbar and an eagle on the staff. Golden guide cords were suspended from the staff and bar, with imitation emeralds, rubies and other costly jewels imbedded. On the white silk was the inscription, in letters of gold, "The Master Builders' Exchange of Philadelphia," surrounding the city's coat of arms. On the blue side was a similar inscription, with the addition, "Chartered February 17, 1887."

Two open barouches containing the following officers of the Exchange followed: President, John S. Stevens; David A. Woelpper and George W. Roydhouse, vice-presidents; Benjamin P. Obdyke, chairman Celebration Committee; Robert C. Lippincott, president Lumbermen's Exchange; William Harkness, Jr., representing the National Association of Builders; William H. Albertson, secretary, and Charles H. Reeves, treasurer.

THE MASTER BUILDERS' EXCHANGE.

Sub-marshals, Samuel B. Vrooman and cavalcade.

Members of the Master Builders' Exchange and Lumbermen's Exchange, dressed in dark clothes, silk hats, white gloves and badges. Among others mounted were the following: Walter T. Bradley, Rush J. Whitesides, William B. Irvine, William J. Shedwick, John T. O'Brien, John F. Prince, Adolphus G. Buvinger, John Atkinson, J. Sims Wilson, William N. Reed, J. Turley Allen, Charles Benton, O. D. Brownback, J. Rex Allen, Hugh Boyd, John G. Ruff, William Peoples, Samuel E. Stokes, W. H. Harrison, Frank Pettit, C. J. Barlow, Zell Tucker, William Staley, Joseph Bird, Robert C. Horr, Nathan Gaskill and Robert Heberton, of the Master Builders' Exchange of Philadelphia.

LUMBERMEN'S EXCHANGE OF PHILADELPHIA.

Sub-marshall, Edward M. Willard.

Two trucks loaded with logs, weighing seven tons each and measuring sixty feet in length, from the forests of Pennsylvania; float containing a pit-saw and two men sawing a log in the old style; float drawn by eight horses, containing a band-saw twenty feet high, made by

London, Berry & Orton; float drawn by eight horses containing planks, boards and other manufactured lumber in the rough.

Another float represented an old-fashioned work-bench, sixteen feet in length, with tools, and two men making flooring as it was worked in ye olden time, when the capacity from sunrise to sunset was but two hundred and sixty feet per day. A float followed having on it an improved planing machine, with a capacity of 13,000 feet per day. Still another float exhibited a surfacing machine, which had a capacity for smoothing-off boards twenty-six inches wide, on both sides at the same time. This machine, a model of the period, was calculated to plane upward of 30,000 feet of lumber in an ordinary working day. A load of surfaced lumber was also included in the exhibit.

Behind the lumbermen's exhibit came the Great Western Band of twenty-three pieces, James F. McCann leader.

THE BUILDING TRADES' COUNCIL.

Sub-marshall, Thomas Parry; aids, John J. Heise and Walter Edgar.

Handsome white and blue banner, with gold trimmings and inscription, "Building Trades' Council of Philadelphia and vicinity," and a number of National flags.

Guests of the Building Trades' Council from the Building Trades' section of the Central Labor Union of New York: Eugene T. Rice, Thomas Maher, Charles P. Rogers, John G. Jones and Robert P. Davis. From the Building Trades of Jersey City: Daniel Spencer. Building Trades' Council delegates, wearing dark clothes, stiff hats and blue badges: William E. Hill, A. H. Bushnell, Lewis C. Chambers, Joel Paullin, M. F. Pitts, Thomas Fields, Eli Leach, Robert McCool, James Goodman, Hugh Owens, John Colgne, Henry Cavanagh, Denis Hogan, M. F. Roberts, J. Henry Bircks, Frank Spiegelbarg, William Bendell, Matthew Schaeffer, William Fuller, Hubert J. Conwell and John Hann.

REPRESENTATIVE STONEMASONS.

Stonemasons' Unions Nos. 1, 2 and 3 (Italian), Philadelphia; No. 4, Germantown; No. 5, Manayunk; and No. 6, Bryn Mawr. Sub-marshals, John F. Mumpoling; aids, James Schofield, Harry Lipp, Thomas Roach, John Arder, Simon Pasquale, William Kroh, Elias Farrell and Edward Bane.

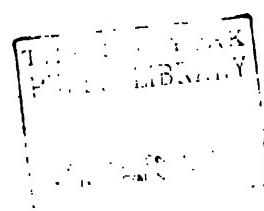
City Band of Philadelphia, twenty pieces, Jacob Lang leader.

Banner of white and blue silk, representing a Corinthian arch, over the face of which was the



LACUSTRINE VILLAGE; SWAMP AND LAKE DWELLERS.

(Photograph by Messrs. Park Brothers, Ltd.)



inscription, "United we Stand; Divided we Fall." Underneath this was, "Journeymen Stonemasons' Association of Philadelphia and Vicinity." On the reverse side was the inscription, "With Stone and Lime we Build for all Time."

Banner, Italian branch, blue and red silk, inscribed, "Italian Stonemasons' Union, No. 3, of Philadelphia." The banner displayed emblems of the trade and of the organization, as well as the motto, "In Union There is Strength." American and Italian flags of silk were profusely displayed.

Wagon of the German stonemasons, with stone, mortar, tools, and workmen preparing a modern stone wall.

Five hundred men wearing white trousers, blue shirts, white caps and badges.

BRICKMAKERS' ASSOCIATION (DOWN TOWN).

Sub-marshals, Samuel Huhn; aids, Charles Young, Robert Paschall.

Brick manufacturers in carriages: Thomas B. McAvoy, Charles B. Siner, Peter Sheets, Harry B. Webster, L. E. Jarden, George Dotterer and James Milnamow.

Sub-marshall, Bartlett Armbruster; aid, Frank McAvoy.

Gray's Ferry Fife and Drum Band, William Akers, leader.

Blue silk banner inscribed :

“Brickmakers of Philadelphia,
Capacity { 1787— 1,000,000 a year—1787.
1887—391,000,000 a year—1887.”

Four hundred men, wearing white hats and belts, blue shirts, dark trousers and blue badges. Float, eight by sixteen feet, drawn by four sorrel horses, decorated with plumes and flags. The seat of this float was decorated with flags, and to the left of the seat a small-sized field dinner bell was kept ringing constantly. Behind the seat was a wooden table four feet square by three and one-half feet high. Near the table was a half-barrel tub on a two-foot stool, full of sand for sanding the mold on the table. On the front corner, opposite the bell, was a pile of clay as taken from the bank, sufficient for one thousand bricks, and this was being tempered by a man kneading it with his feet, preparing it for a man working at the table.

Float No. 2 was of the same style as Float No. 1, and was drawn by four bays. On the side was the inscription: “Old Way Cutting and Rubbing Front Bricks—by Hand.” In the centre of the float was a pile of three hundred

bricks, around which were four men rubbing them with sand as they came from the molds, shown on Float No. 1, and then trimming them with ordinary case-knives.

Float No. 3 was Samuel P. Miller & Sons' exhibit. It showed three specimens of the progress of brick-pressing machinery, from hand to steam, during the past half century. The machines shown were made of iron. The first was a hand-press in use for several years, from 1830 to about 1850, formerly made by Burns & Co., of Baltimore, Md. It was an iron frame or table, three feet long by two and one-half feet high and one foot wide. On this machine's banner was inscribed, "Old Style Hand-press; Capacity, 1300 per Day."

The improvements in hand-presses was shown by another press, similar in size and make to the old one, the principal change being in the reversal of the lever, which was thrown in or toward the **brick box**, economizing the actions of the workman. It was about six inches longer and a little higher. It took the bricks from the brickmaking machines and prepared them for the dryer. The banner on the machine read: "Capacity, 20,000 per Day."

Six iron-gray horses, with their harness trimmed with yellow patent leather, drew an

old brick kiln, four by eight feet, of three brick arches, which could burn about 2000 bricks at a time, against 250,000 by a modern kiln, and on the side was "1787—Old Way—Burning Bricks by Wood." There was a cord of pine knots being thrown in by two men, who used a crooked wooden stick for a poker.

Float No. 5. "The Way We Make Them Now by Hand," was the inscription on the side of this float, which was drawn by four handsome roan horses. Behind the seat was a four-foot table upon which were two iron molds operated by a man making bricks by hand. A boy was the "off-bearer," and a man wheeled material to the mold from a pile of clay ground by steam.

"As We Pass Them Now" was the inscription on Float No. 6, which exhibited two men operating a Kueny press, which is similar in construction to the ordinary modern hand-press, except the articulation of the hand-lever with the "horse" or large lever below. Two other men on this float were engaged in making pattern bricks of various shapes used in cornice ornamentation.

Float No. 7 began the display of Chambers Bros. & Co. On a platform drawn by four bay horses, with plumes and flags, was a banner

inscribed "1787-1887, Chambers Bros. & Co.'s Process of Manufacturing Bricks—Six Hundred Million Annually." There was an upright steam engine on one side of the centre, with water tank, coal box, etc., and a supply of brick clay, as taken from the bank, tempered with water, and prepared by the sand and molds for the dryer. The machine was on a large box table, and was a working model one-fourth the regular size, which is fifty feet long by eight high and four wide.

On float 8 was the "artificial brick dryer—Pallet system." This was a brick tunnel, four feet wide and four feet high, with an escape at one end to carry off the moisture, and a coal furnace fire at the other.

The next float was laden with ancient bricks and tiles taken from a kiln that was unearthed by graders on the Pensacola and Atlantic Railroad. Trees nine feet in circumference were growing over this kiln. Citizens of Florida, who could readily recall events of sixty-five years ago know nothing of its origin. There was in addition a collection of bricks, ranging in size from an inch and a half to fifteen inches long.

Machinery for an improved method of preparing the clay and making bricks was exhibited by George Carnell.

On the front part of the float was placed an old-style hand press, such as was used in olden times for pressing bricks. Back of this was one of the latest patent Carnell steam presses, by means of which a man can press quite as many bricks in an hour as he could in a day by the old method.

A display was also made of a steam mill with sufficient capacity to grind and prepare enough clay for twelve gangs of three men each—each gang turning out 2240 bricks a day.

N. M. Kinney's exhibit of improved machinery for pressing front brick by hand was on another float, with improved machinery for tempering clay, and a device for sharpening and squaring bricks.

Another float was occupied by a four by eight-foot kiln of three brick arches, with iron doors and door frames, iron gratings, with ridge pole and board roof, for burning bricks in the modern way. Bituminous coal was shoveled in by two men. The inscription on the side of this float was "Old style, 25,000 in seven days and seven nights: new style, 250,000 in five days and five nights."

Motto: "No handicraft with us compare; we make our bricks of what we are—clay."

On the centre of the platform was a mantel, four feet high by six feet long, of ornamental

red-clay boxes. From each end of this was a double row of shelves supporting displays of pressed bricks of many shapes, made by L. E. Jarden & Co.

THE CLAY ASSEMBLY OF KNIGHTS OF LABOR.

Clay Local Assembly, No. 6789, Knights of Labor (brickmakers).

Sub-marshall, John McMahon ; aids, Thomas J. Owens, George Peterson, Robert Risley.

“Q. Brown” Band, eighteen pieces, A. McKnight, leader.

National flags preceded a handsome blue banner, inscribed: “Clay Local Assembly, No. 6789, Knights of Labor, Brickmakers, organized April 29, 1886.”

Four hundred men, wearing blue shirts, brown hats, white belts, white ties and blue badges.

MASTER BRICKLAYERS’ COMPANY.

Master Bricklayers in carriages.

Sub-marshall, Richard C. Ballinger.

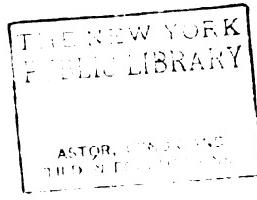
Banner: “Master Bricklayers’ Company of Philadelphia, instituted 1790,” in red and blue silk.

Twenty carriages, containing the following officers and members of the organization: Henry R. Coulomb, president; Edward S. Fitch, secretary; Stephen Morris, treasurer; Jacob Loesser

and Nathan Middleton (the two oldest members of the Company), Samuel Hart, Joseph B. Hancock, John H. Miller, Miles King, Michael Magee, M. Ballinger, John E. Moore, Michael B. Andress, William Smith, William Harper, Jr., John Furman, Benjamin Shourds, Lewis Snyder, Joseph H. Weston, Henry Einwechter, Theodore J. Fimple, David Armstrong, Joseph Brant, Joseph H. Howard, Jr., W. R. Chapman, S. E. Moore, J. H. Faires, John A. Potts, F. N. Forsyth, John T. Gordon, David Getz, George Einwechter, Charles Einwechter, George P. Einwechter and John A. Einwechter, Thomas Magee, Robert Studholme, Joseph P. Evans, James W. Saunders, John Borden, William W. Crane, William Shelly, Daniel Henon, John Henon, Edward T. Black, John C. Atkinson, John Escandel, John R. Fullerton, John H. Fullerton, H. M. Boorse, Andrew Diamond, Charles Stewart, B. L. Callom, W. C. Hyzer, Isaac D. Hetzel, John W. Gill, William Fullerton, L. H. Eckert, E. U. Lippincott, James Turner, William R. Green, Reuben Owens, John Hendricks, John George, George W. Payne, John G. Moore, William C. Mullen, William Stilley, E. E. Nock, Charles Ryan, John D. Brosnahan, James F. Hoctar, S. P. Ferder, E. E. Kelley, Jacob R. George, William J. Gillingham, John Campbell, M. Naughton, H. D. Saunders and J. T. Glenn.

DWELLINGS OF THE GERMANS AND GAULS.
HABITATIONS DE MARS. PLATE EIGHTH.





HOD CARRIERS' DISPLAY.

Light Star Lodge, No. 1 (hod carriers).

West Chester Liberty Cornet Band, twenty-six pieces, W. H. Thomas, leader.

Sub-marshals, Thomas C. King; aids, Isaac B. Matthews, G. H. Massey, Charles Weston, John O'Brien.

Officers in barouches: B. F. Trusty, president; I. F. Miller, vice-president; Daniel Lynch, ex-president; William Jenkins, treasurer; H. W. Fields, financial secretary; R. D. Britt, recording secretary.

Banner: "Light Star Lodge, No. 1, United Hod Carriers' and Laborers' Union, Philadelphia." upon which was a representation of a man carrying a hod up a ladder after the old fashion. On the reverse side was inscribed, "Instituted March 28, 1881." The Union also displayed a handsome banner, presented them on June 29, 1882.

Pioneer Corps.

Five hundred men, wearing white suits and black caps, with blue badges and rosettes. Many of the men carried gaily decorated hods, and the Union displayed a float containing an upright ladder and a number of hods.

ROOFERS IN THE LINE OF MARCH.

Sub-marshall, John Byrd.

All the wagons in this display were covered with bunting, and around the platform of each was a cornice of galvanized iron. The first float represented a primitive bark cabin, four by six feet by five feet high from base to cone, and on it was an old German thatcher tying the bundles of straw in place. The straw was first made up into these bundles, which were tied with thongs and laid side by side in tiers across the roof, their butts lapping the under tier.

On the next float a man was at work placing red tiles as they are fixed at the present time.

Float No. 3 illustrated ornamental slate roofing. The slate was of different patterns, the edges of uniform angles and curves, the materials used being red, green and black.

Roof making as an art was displayed on the next float. It represented the latest style of French mansard square slate roof. The structure was about eight by ten feet, with a dormer window on the left and a tower on the left front corner, looking from the inside. Through the window appeared the driver of the float,

and on the roof a man was busily nailing on shingles.

On the cone of the roof was a comb twelve inches high, of a succession of circular figures, from which there dropped down on the slate an apron twelve inches deep of similar figures, all in hand-hammered copper, as was also a rope design supported by box sides running down each corner of the roof to the cornice. At the base of the roof the hammered-copper cornice overlapped three feet. This cornice was made up of diminutive corinthian columns about two feet apart, to correspond with the size of the float. Between the columns were panels consisting of a rustic box border inclosing a spiral radiation about eight inches square, all of one piece. The tower began at the eaves with imitation stone three feet high, reaching to another three-foot copper face of gothic leaves, surmounting which were the turret and the cone finial.

On another float was a house being roofed with tin by three men, who took the metal from rolls which were prepared by five other men under this roof. The five represented the latest method of taking the metal from square blocks and working it into the rolls. In addition to the benches in use, a Calvert machine was at work.

Seventy-five tin roofers and sheet-iron workers. These men wore blue shirts, white overalls, white belts, polka-dot neckties and blue felt hats.

THE FIRST TRADE SCHOOL.

Sub-marshall, Frank P. Brown.

A section of the old wooden water pipe which carried the water from the "city water works," in Centre Square, now the site of the new City Hall, was displayed upon the first float. It represented the water pipe of the last century, when the sections were tapered at the ends and bound with iron ferules. The inscription over the section of pipe was: "Wooden Water Pipe of Philadelphia in 1799; largest size, six-inch bore." The old pipe was taken from under the City Hall just prior to the parade, and was in a remarkably fine state of preservation. It measured eighteen feet in length and showed the tapering ends. On a catamaran behind it was a section of the largest water pipe of the present day, exhibited by R. D. Wood & Co. The iron pipe was six feet in diameter.

Next came a float eighteen feet long, containing a representation of the "bath-rooms of 1799 and 1887." The old-style room contained an oval-shaped portable tub, that would readily be

mistaken for a horse-trough in these days of gorgeous bath arrangements. With it was an old straw-bound log hydrant, and a washstand, consisting of a cross-piece on the tub, with a tin basin resting on it. The modern room contained a neatly-lined tub, fancy porcelain wash-stand and water-closet, on a tiled floor.

Behind these exhibits was a float representing the "Master Plumbers' Trade School," with a dozen boys dressed in overalls, jackets and caps, at work. These boys were pupils of the first trade school for apprentices established in the United States, it being a purely Philadelphia institution. The boys gave clever exhibitions of their progress in the trade.

DOORS, SASH AND MILL WORK.

Sub-marshall, Charles Gillingham.

Three floats, under the auspices of the Philadelphia Saw and Planing Mill Association.

The first was drawn by four horses and represented an old-fashioned carpenter shop with two carpenter benches and men at work making doors.

On another float, drawn by six horses the modern method of making doors and manufactured work was demonstrated by a corps of mechanics and the necessary machinery.

The third exhibit, on a float drawn by four horses, consisted of a pyramid on which finished work was adjusted. This included doors, sash, window frames and wood mantels, finely finished in oak, white pine, ash, walnut and other fancy hard and soft woods.

LATHERS ON PARADE.

Sub-marshals, Jacob D. Hanley.

Decorated float containing an arch, showing methods of lathing, under the auspices of the Lathers' Mutual Protective Union of Philadelphia. The design was so arranged as to admirably illustrate the various kinds of lathing which is rendered necessary by the ever-changing styles of architecture.

PLASTERING, OLD AND NEW.

Master and journeymen plasterers' combined exhibit.

Sub-marshals, John Cannon; aids, James Malone, Edward Donnelly, Michael Kelly, Michael Welsh, Robert Clay.

Americus Band, twenty pieces, Thomas Cobbin, leader.

Banner, blue and red silk, inscribed "Operative Plasterers' Mutual Protective Association," with representation of plasterers at work and

the date of organization, September 5, 1879. Behind this were carried two large silk flags.

On one large float was given a representation of the various grades of plastering, such as ordinary white coating, hard finishing, finishing in colors and pebble dashing. This pebble dashing, by the way, is but a revival of a method employed a century ago, when, however, the pebbles were thrown into mortar, the whole costing from twenty to twenty-five cents per square yard, while now they are thrown into cement at a cost of from \$1 to \$1.50 per square yard. The tools used in the trade formed the exhibit on the second float.

About two hundred journeymen plasterers turned out, dressed in white jackets and overalls and white hats.

IRON AND METALS.

Washington Grays' Band.

Second Regiment Fife and Drum Corps.

Sub-marshall, J. Stein Thorn; aids, W. B. Goddard, Eugene Crocket and William Doyle.

Banner wagon. Blue silk banner upon which was painted a mechanic's arm and the inscription: "Thorn's Architectural Sheet-Metal Works."

Decorated wagon containing aged and disabled workmen.

One hundred men from the shops of J. Stein Thorn, wearing dark-blue flannel shirts, blue overalls, black silk neckties, dark felt hats and light-yellow badges. Each man carried a tool used in the trade, such as a hammer, a sledge or a soldering iron.

One platoon carried beautifully ornamented weather vanes on staffs and another bore the colors. In the centre of the company was a handsome blue silk banner, with a mechanic's arm and hammer on it, with the inscription:

“By hammer and hand
All arts do stand.”

This motto was used in the great industrial parade of one hundred years ago. Each officer in line carried a decorated banner.

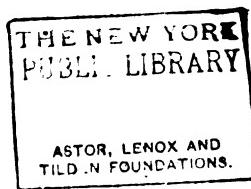
Behind the men came a float, drawn by four horses, containing a finial twenty-five feet high. The base was of copper and on top was an eagle with a spread of six feet. On the eagle's head was a large gilded ball surmounted by a cross.

The next float, drawn by two horses, bore a massive copper lion. One paw of the figure held a hammer over an anvil.

An old steeple built in 1783 was drawn by two horses on the next float. The old shingled roof and quaint weather vane bore a striking

TAPLAND VILLAGE,
HABITATION OF MUS. PAPE EXPEDITION, 1860.





contrast to the magnificent octagon-shaped copper spire that followed on a truck, with four spirited horses. To the trade the material used is known as "cold-rolled polished copper." The design measured eight feet in diameter at the base, and was surmounted by a handsome banneret and finished weather vane.

Another team of four horses drew a metal dome and cornice, with a ventilating skylight on top. Under the cornice was a metallic representation of brickwork. The horses were decorated with yellow trimmings. All these exhibits were included in the display of J. Stein Thorn.

ART METAL WORK.

Under the same classification, the iron-workers of the Master Builders' Exchange made an elaborate display of "Antique Iron Work Revived," and "Specimens of Handiwork." The first float contained an old-fashioned blacksmith's shop, with the familiar leather bellows, blown now and then by the smithy, upon the fire in the forge, the smithy and his helper illustrating the old-time method of making ornamental iron work, including chandeliers, andirons, etc., of which many beautiful specimens were exhibited.

On the other side was the modern shop, with improved bellows and tools. About a dozen men manned the float, all wearing red shirts, paper hats and leather aprons.

On other floats William F. Adams & Co. exhibited ornamental iron work, including vases, fountains, cemetery railings, chairs and benches.

David Pettit & Co. exhibited wrought-iron railings, vases and ornamental iron work.

HEATERS, RANGES, GRATES AND TILES.

Sub-marshall, David H. Watts.

One float exhibited an old mantel, made in Holland, said to have been preserved for more than two hundred years. The Scriptural scenes illustrated on it are said to be of a similar character to those made by manufacturers in Holland at the present time. A black mahogany mantel, with improved fireplace, portable grate and new-style decorations, was presented by Sharpless & Watts in contrast to the old.

Another float represented workmen manufacturing mosaic by the process of olden times. The mosaic of to-day, it was said, is substantially the same in the produce and method of manufacture as it was when used on the floors of Pompeii.

In this section the Philadelphia Exhaust Ventilator Company exhibited an eight-foot

iron ventilating steam fan, with the inscription: "The Blackman Wheel moves 200,000 cubic feet of air per minute."

A float displayed by George W. Hartman presented old and new heaters, and another exhibited "The Keystone Metal Stove Boards."

PINTS AND GLASS.

Sub-marshall, Adolph Heine.

Four interesting displays on floats were made. In the first was a table at which the men were working with mullers, of the ancient wooden and less ancient stone style, on a stone slab.

They were grinding paint in the old way.

Beside them was an old-fashioned kettle, with two cannon balls inside, for grinding white lead; the kettle was suspended, and the balls were made to roll around over the white lead by pushing and turning the kettle. In addition to this was an illustration of the old system of stirring paints in a keg with a stick. The whole was labeled, "Philadelphia Paint Grinding, 1787."

Each of the four horses drawing the float was led by a man wearing a cape and straw hat. The men at work on the wagon were dressed in Continental uniform, including knee breeches, low shoes, old-style muslin shirts, big collars

and three-cornered hats, wigs and queues, indicative of the times when all paints were imported.

The display on the second float presented the contrast. There was a ten-horse power engine and boiler running the stone-burr mill, until recently in common use; behind this was the modern mill, consisting of rollers, lying contiguous and running in opposite directions, sending the paint from one to the other and grinding it for use. The paddle mixers, now run by steam, were also illustrated. The three men attending the machines were dressed in the garb of modern workmen. The display was labeled, "Paint Grinding, 1887," with this reference to the progress in the trade: "1887. Philadelphia produces annually, under a protective tariff, 84,000,000 pounds of paint."

The progress in the manufacture of glass was shown on the floats exhibited by Hires & Co. On one were four frames containing four lights, each of ornamented colored glass made in this country. A window-frame, seven by nine inches, was labeled, "Window glass; largest size made in 1787." Near it was a pane fifty by seventy-five inches, labeled, "Window glass; size made in 1887," it being the largest size of cylinder glass made in the United States. The first

process in making window and picture glass was shown; also, "blowpipes used in the manufacture of window and picture glass." The whole story of the trade was summed up in the following sign: "Progress in window and picture glass: 1787, one small factory! 1887, 142 factories, employing 7000 hands, producing 175,000,000 square feet, valued at \$6,000,000. Capital invested, \$4,000,000."

A piece of plate glass, measuring ninety-six by one hundred and eighty inches, followed on the next float, to show the size of plate glass made in the United States. Accompanying it was the label: "Progress in polished plate glass: 1787, no factories; 1870, one factory; 1887, six factories, employing 2600 hands. Value of product, \$4,000,000. Capital invested, \$450,000."

MASTER PAINTERS.

Sub-marshals, Charles McCarty.

Three carriages, containing officers and members of the Master Painters' Association, as follows: Joseph Chapman, president; Francis F. Black, secretary; Maurice Joy, treasurer; William B. Carlisle, J. B. Scattergood, Stephen D. Cole, John Stewart, M. McCarron, Albert Sheer, James C. Taylor, William Pegley, William Graham and W. J. Hayes.

Large float, the combined exhibit of employers and journeymen, representing the painting industry of Philadelphia. On one side was painted two houses, one representing the old style, with painters on a ladder daubing the structure red and green; the other showing the painter of to-day, on swing stages and trestles, applying modern tints.

On the other side of the float were two shops —the paint shop of a century ago and the modern establishment, with upholstered offices and fine appointments. On the rear of the design the whitewashing of one hundred years ago was contrasted with the frescoing of the present period.

JOURNEYMAN PAINTERS.

Sub-marshall, John Sage, Sr.; aids, Benjamin R. Neilds and Patrick McMenamin.

Columbia band.

Banner in blue silk, inscribed: "Presented to the Journeymen House-Painters' Association of Philadelphia, A.D. 1866," on which was painted a representation of a phoenix over the painter's shield, with rampant tigers facing each other.

Under the shield were the words, "Love, Honor, Obedience."

Three bannerets, explaining the significance of these words were displayed. The first, in red

silk, read, "We love our country;" the second, in white silk, "We honor its institutions;" the third, in blue silk, "We obey her laws."

One hundred men turned out, dressed in white shirts and hats, with new brushes in the pockets of their overalls. Behind the painters came a log cabin, representing the abode of the settler of one hundred years ago as nearly as it could be reproduced by the skilled mechanics of to-day. The interior of the cabin was ten feet by twelve, and seven feet high. The walls were of unplaned hemlock logs, dovetailed at the corners; the roof was peaked, with several logs fastened lengthwise, to add to the strength of the structure; and the only means of entrance and exit, a doorway on one side, was secured by an improvised door on wooden hinges, with the old style wooden latch and cross-bar. A window in the front of the cabin lighted the interior, and through a chink chimney in the rear the smoke from a fire which was kept burning on the inside passed out into the open air. The crevices between the logs were roughly plastered with a mixture of clay and cement, to protect the occupants of the cabin from wind and rain. On either side of the cabin trees were planted that had been secured from one of Pennsylvania's many forests.

CARPENTERS AND STAIR BUILDERS.

Sub-marshall, Constantine Thorn. Assistants,
William F. Everhardt, Thomas Fleming, Isaac
Reynolds and Isaac Belour.

Cecilia Band, twenty pieces; Peter Burns,
leader.

Twelve Pioneers with genuine broad-axes;
Harry Bowstead, captain.

Silk banner: "Brotherhood of Carpenters and
Joiners of America, instituted August 12, 1881,"
and a silk flag.

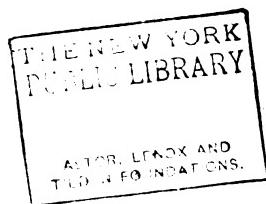
Banner presented to Local Union No. 8,
Brotherhood of Carpenters and Joiners, by
Messrs. Tallman & McFadden. This banner
was found in the old mansion, No. 307 South
Third street. It is of pale-blue silk, about six
feet long by four feet wide, and was painted by
I. A. Vanchost, in 1835.

The banner was painted for the Journeymen Carpenters' Association, as stated on one side, with the addition that the body was instituted in June, 1835. The front represents carpenters at work, with tools of their trade lying around. A youth is in the act of tapping one of the workmen on the shoulder with one hand and with the other pointing to a neighboring steeple clock, the hands of which pointed to the hour of six. In a conspicuous place in the

HEBREW HOUSE—1000 YEARS BEFORE CHRIST.

Reproduced by Messrs. Parry & Son, Ltd., 1900.





foreground is a block bearing the inscription, "Six to Six," the watchword of all mechanics in those days.

On the reverse side is a painting of a woman, the Goddess of Liberty, supporting an American flag and surrounded by two male and two female Indians, to whom she is pointing out the motto of the Association: "Union and Intelligence, the Path to Independence." The banner, which is in an excellent state of preservation, was carried in the Lafayette celebration parade in 1835.

About 800 men, neatly costumed, turned out with the Brotherhood. They represented all of the unions in Philadelphia and vicinity, including Camden. They wore lead-colored hats, white shirts with turn-down collars, black neckties and muslin aprons, with the name and emblem of the Brotherhood printed on them. They all carried towel rods in lieu of canes.

They had a number of interesting banners in line. Among them the following inscriptions were most prominent:

"Our Brotherhood is 42,000 strong."

"We work only nine hours a day."

"We aid the sick and help the widows and orphans."

"Trades Union men are loyal to American Institutions."

REPRESENTING THE FATHERLAND.

The German Union carried a banner unique and beautiful. It was made of shavings strongly woven together, the whole being beautifully painted. The Ivy Fife and Drum Corps, of Camden, Thomas Myers, major, was with this display.

The modern cottage, which was built at Broad and Dauphin streets under the direction of the Master Builders' Exchange and the Building Trades Council, was to have brought up the rear of the line in the Sixth Division, to represent the triumph of one hundred years in the building trades, but it was left behind, as an unfortunate accident to the truck upon which it was built rendered transportation impossible.

The cottage was built by Union carpenters, under the direction of J. W. Sutcliffe, and was painted by Union painters, under the supervision of John Sage, Sr. Architect E. W. Thorn prepared the plans and generally supervised the erection of the structure. It was of Swiss design, cozy and decidedly pretty, with peaked roof and dormer windows. It was nearly eighteen feet square. In front was a four-foot wide porch, with steps leading up to it, fancy posts and ornamental railings. In the rear was a wash house, four feet by seven. The doors

were of the latest make, on brass hinges, and the windows were of white and stained glass in fancy sashes.

The front door opened into a reception hall with a magnificent oak stairway at the side. The parlor was beautifully papered, elegantly furnished, contained an open fire-place and mahogany mantel, presenting, in all, a most inviting appearance. The dining-room and kitchen were also finished in the very best manner and comfortably furnished.

On the second floor were three rooms nicely papered and fitted up as bedrooms with modern furnishings. The two rooms in the attic were also fitted up in good taste with everything that could be desired in the way of comforts.

The roofs over the building proper and the porches were of metallic shingles. The rounded red-cedar shingles extending several feet below the cornice were neatly oiled; the overlapping weather boards were painted in light and dark terra cotta, trimmed with bronze green, and the sash of Tuscan red. The base was painted to represent foundation stone.

The homelike picture conveyed by the trim cottage and its furnishings was made complete by actual habitation, the occupants being the family of Gerald Breen, a disabled member of

Local Union, No. 8, Brotherhood of Carpenters and Joiners, and Joseph Sutcliffe, a six-year old grandson of the foreman of the building.

In the history of the great national event, published by the Bi-Centennial Committee, much space is given to this exhibit and full credit is given the Master Builders' Exchange of Philadelphia for the splendid display made under its management. It was a success in every way, and the various committees in charge of the affair earned the commendations received from every side. As a historic display it was absolutely correct, and as a pictorial effect it was a triumph.

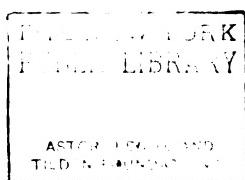
At a meeting of the Exchange, held on September 13, 1887, it was decided to borrow \$100,000 and to open subscriptions for stock for the purpose of paying for the property purchased of the German Society, and on October 25, following, it was reported that the building had been paid for in full. At this same meeting John T. Prince was elected to fill the vacancy in the Board of Directors caused by the resignation of Hugh Copeland.

A movement to make practical use of the Exchange was inaugurated by Stacy Reeves on November 22, 1887, when the following resolution was offered by him and finally adopted by the Exchange :

In Memoriam.

1887.

WILLIAM M. LLOYD,
June 26th.



THE LIBRARY OF THE
ASTOR LIBRARY

ASTOR LIBRARY
TODAY

Resolved, That contractors should decline to give bids in the aggregate when the owner or his agent is receiving estimates in detail for the same work, and that no member should give an estimate in detail when estimates are being received in the aggregate.

On December 27, 1887, the following gentlemen were elected to represent the Exchange at the Annual Convention of the National Association of Builders, to be held at Cincinnati, O., February 7, 8 and 9, 1888: William Harkness, Jr., Delegate-at-large; George Watson, David Woelpper, George W. Roydhouse, Franklin M. Harris and William C. McPherson, Delegates; William McCarter, Charles H. Reeves, Stacy Reeves, Benjamin P. Obdyke and John J. Weaver, Alternates.

III.

The Annual Meeting held on January 24, 1888, was attended by nearly every member of the Exchange, and it was with great interest that the reports were received from the Board of Directors and the chairmen of the various committees.

The Board of Directors reviewed the history of the Exchange briefly, and outlined the policy and progress of the organization. The National Association of Builders was invited to meet in Philadelphia in 1889; after which Stacy Reeves, George W. Roydhouse, William H. Albertson,

J. Stein Thorn. George Watson, William C. McPherson and Fred F. Myhlertz were elected members of the Board of Directors for terms of three years, and William Gray for a term of two years.

The Entertainment Committee was increased to ten members on February 28, as follows: David A. Woelpper, Franklin M. Harris, Murrell Dobbins, Stacy Reeves, Charles McCaul, Jacob R. Garber, George Watson, Peter Gray, Joseph E. Brown and Allen B. Barber.

As at Chicago, the Philadelphians attending the Cincinnati Convention took a leading part in all the discussions, and the official report of the proceedings shows that their labors were rewarded with success. The question of apprenticeship precipitated a lively debate, during which John S. Stevens, of Philadelphia, said:

I believe those who have charge of our public-school system should educate, in a measure, the hand as well as the head. We all know that a great many changes have taken place since my venerable friend George Watson was a little boy and went as an apprentice to his trade. At that time it was considered sufficient if a boy started off with an education consisting of the three R's. Then he was ready to go to his trade at the age of fourteen, fifteen

or sixteen years, at least. He lived with his master, and learned his master's trade. Now, with the great advance made in science and the mechanical arts, it becomes more important to have a higher education. It is not sufficient for a lad of to-day who wishes to learn a trade to understand merely his multiplication table; he must know higher mathematics—must be able to read French and German books and publications that are authorities in the different departments of the mechanical arts and trades. We require for our boys of to-day whom we wish to become mechanics a higher education than we received. Such is the advance made in this country. Now, we can't crowd all this into a boy's head in six years; that is impossible; but this we can do: We can supplement in our public schools the education of the brain by the education of the hands, so by the time the boy arrives at the age of eighteen years he will have an education that will be equivalent to two years of apprenticeship under the old system, knocking about in shops, because he will have had it taught him by competent masters. In former years a lad who was apprenticed to his trade was allowed fifty dollars a year for his clothes—he boarded with his master—and at the end of his apprenticeship, in most cases, a

sufficient amount of tools to go to work at his trade. This was his pecuniary compensation. To-day we have to pay a boy five or six dollars a week for his board. We won't have to teach him how to handle and use his tools—that he will know already. The consequence is we want them educated, so that, at the age of eighteen or twenty years, when they come from the public schools, they will have learned as much (for practical purposes) as the boy of former times learned in three years' experience in his master's shop. My idea is that the public-school system of the country should accept manual training as a part of its education—educating the hands as well as the brain ; and then when the lad comes out of the school he will be prepared, if his desire is to become a mechanic, to attend some such school as Colonel Auchmuty has established in New York—a Trade Training School. My theory is that, if the education of the brain is supplemented with the education of the hand, by competent teachers, in our public schools, our boys could attend trade schools in the evening, if needs be ; and, if this was to be begun now, in less than ten years we would have a better class of mechanics than we have ever had in this country. Now we have to depend on the foreign countries for

ETRUSCAN HOUSE—1000 YEARS BEFORE CHRIST.
MANUFACTURED FOR MESS. PARIS EXPOSITION, 1867.





our workmen, who come in the spring and go away in the fall—come back, and go again—taking away with them money that should be kept at home. Then we will have a high-grade class of American mechanics to do the work of this country.

MR. McCARTHY, of Chicago: Mr. President, since my good friend Stevens has set the example, I will also confess to a weakness, a willingness to be heard, as I have given some thought to this subject. I will endeavor to be as brief as possible in presenting a few facts as they have occurred to me. It seems a fitting start in my talk to you, Mr. President and gentlemen, this quotation from the poet Tennyson:

“We hold it truth, as the poet sings,
Men arise on stepping-stones
Of their dead selves to better things.”

In asking for a change from the present educational methods, it devolves upon those who seek the change to give reasons for the faith that is in them. While contending for a new method, it must be constantly borne in mind that the old system has many things in its favor, and must, of necessity, be a part of any new plan which may be adopted. A strong argument in favor of the manual idea of education is the fact that New England, the first to adopt

the present method, was likewise the first to give it up and adopt the new. Massachusetts was the first State to take up the present system. It has recently, by legislative enactment, adopted the manual-training system in the public schools. The old or present plan is purely speculative, is based upon faith, and is liable to err. It leaves off where it should begin, by the practical application of its theories; not five per cent. of its graduates are mechanics. Nearly all of them enter mercantile or professional life. Ninety-five per cent. of our merchants fail. Legislators and judges are continually undoing the mischief of their predecessors. It is opposed to manual labor, and places the artisan beneath the artist, and may be looked upon as a polite accomplishment rather than a practical necessity. The education of the wild Indian fits him for the life he is to lead better than would our system. It teaches him to fish, hunt and shoot, — the reason that his time will be devoted principally to those pursuits during his maturer years. An educational commissioner in the East, during his examination of one of the graduates of the grammar class handed him six cards and requested him to return half of them, and was handed back three cards; but, upon asking the same pupil to hand him one-third of

one-half of the six cards, was unable to do so. The present system bears the same relation to the manual plan as does the reading of a treatise on food assimilation to a hungry man, instead of giving him a ham sandwich, or trying to teach a boy to play base ball by reading to him the rules of the game, but not participating in the game itself, or treating a large carbuncle on the basis of Christian science. Manual training is the realization of the dream of all great minds in the science of educating the youth ; it is the school of the future. It teaches by things, not by words ; it teaches absolute truth by application ; dignifies labor by example, fits for the practical duties of life, and is the first step in a reasonable solution of the now obsolete apprenticeship system.

Carlisle says : "A man without tools is nothing ; with them he is everything. Tools form the dividing line between barbarism and civilization ;" and again he says : "Things which must be done should be learned by doing them." Franklin says : "Good apprentices make good citizens ;" and the truth of the saying can be readily demonstrated. Statistics prove that less criminals are to be found among mechanics than any other class of men. A recent Pennsylvania prison report shows that of 495 inmates 487 had attended the public schools,

tions as will assist in bringing about the adoption of manual and mechanical education on the most sensible plan, either by their adoption in the public schools of our country, or by assisting in the establishment of such schools through private enterprise.

At the banquet on Thursday evening, February 9, 1888, Mr. Stevens, who had then been installed as President of the National Association, in responding to the toast: "The Brotherhood—The National Association of Builders," said: Mr. President, Toast-Master, and Gentlemen—The sentiment you have given me to respond to, the Bond of Brotherhood, is one that touches upon our social relations as fostered by the National Association. We, as builders, are encouraged in the great work of laying the foundations of the Brotherhood deep, wide, strong and enduring, and upon it we are erecting an edifice ornamented by mutual respect and affection, filling it in all its parts. This work that we are doing socially, as I had occasion to say during one of our sessions, if we accomplish no other good than to cultivate our social relations, we are doing a great and good thing, because many of us who lived years before as strangers to one another are becoming brothers indeed. We felt it when we went to



OFFICERS OF NATIONAL ASSOCIATION OF BUILDERS, 1888.

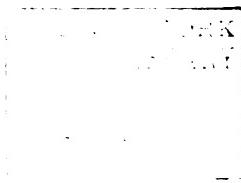
WILLIAM H. SAYWARD, SECRETARY.

E. E. SCRIBNER, FIRST VICE-PRES.

GEORGE TAPPER, TREASURER.

JOHN S. STEVENS, PRESIDENT.

JOHN J. TUCKER, SECOND VICE-PRES.



Chicago ; we feel it now here in Cincinnati ; and when you come to our City of Brotherly Love you well know there will be open arms to receive you, and that the latch-string will always be out. We have our Exchanges as places of meeting, and when we go to any of our cities we know there is a gathering point where one can go and meet with friends. The time was, and not long since, when as we went from city to city we went as comparative strangers. It would not be so now, because the Brotherhood has given us friends in all parts of the Union—friends and brothers who will visit with each other.

So much for the Brotherhood.

Now, in regard to the business interests which draw us together ; you know the old saying, "A fellow-feeling makes us wondrous kind." Our interests being identical, our Exchanges are places where we exchange ideas, where the weak can gain strength from the strong, and the learned can impart knowledge to the ignorant. We are learning that our strength may become the common property of all. Some of us who have made a study of the objects of our Exchanges have found they are still in their infancy, and the object of this National Association is to foster the growth of Exchanges in

all cities. Then, again, we have a greater work than the business interests. We have the common good of our common country at heart. Now, there is a question that has been puzzling the minds of many thinking men for years, *i.e.*, What would be the greatest good that could be given to this great nation? I have given some little thought to the subject myself, and I think there are other members of this national body and our other Exchanges who have thought something of it; and I tell you, gentlemen, that one single subject that was brought before our convention to-day—the subject of a system of apprenticeship—will be a grand and a noble scheme for this National Association to work out. Years ago, as I had occasion to remark to my brethren, all the education a lad required to learn a trade was a knowledge of the three R's; but, gentlemen, those times have changed, and it takes a boy now until he is eighteen years old, at least, to get the education he requires. It is not enough that he knows the multiplication table. He must know algebra, mensuration, and the higher mathematics; and *we* propose to supplement this education of the head by the education of the hand. **We propose that the public schools shall do this—not to teach the boy a trade, but how implements of labor**

should be used, so that by the time he is ready to leave school, at the age of eighteen, he will have the head knowledge and the hand knowledge to go into your or into my shop to work at learning a trade. We propose further, in addition to these manual-training schools, to have our technical school and our trade school, where a boy may learn the practical art of bricklaying or carpentry, etc., just as I send my boy to college to get certain instruction there. I want to make an intelligent man out of him, and so give him the advantage of an education which I propose to supplement by hard labor, so he can become a useful member of society. For many years back mechanical occupation has been, in the public estimation, assigned to the lower stratum of human endeavor; but, gentlemen, it is your right, and if you demand it, it will be freely accorded to you, to walk on the same plane with, and as the peer of, any other professional labor. It is not possible under the idea now prevalent in our school system, where it is taught that learning is pre-eminent as leading up to the so-called higher walks of life. Why, gentlemen, it is but a few years ago when a few of our guild came together in the city of Philadelphia to consider some matters pertaining to building, and after a few inquiries some

of us went to looking over the statistics, and what do you suppose we found there? We found that during seven years we had built 32,000 structures at a cost of about \$160,000,000! Well, this set us to thinking. If our business had a magnitude like that, and we could have had margins quoted for us like our Board of Trade, our importance in the community might have been better understood. Last year we put up 9000 structures, 894 of them at a cost of \$45,000,000; and this is the volume of the business we carry on. A similar experience has been had in Chicago and New York. Now, if our business has a dignity and a vastness like this, why should we not take that place among the occupations of men that belongs to us? I am proud, exceedingly proud, to be classified as a mechanic, and when I look around me here to-day I am *doubly* proud that I am a mechanic. I had occasion to say this afternoon, in thanking the Convention for the honor of electing me President, that it had been my misfortune or good fortune, I don't know which, to attend many conventions, but that I had never looked upon a gathering where there appeared to be so much intelligence and respectability, and where the same amount of solid work was done, as in the Convention just held.

It was a meeting of which every member can feel proud, and feel it was an honor to have belonged to it. Now, in regard to this matter of mechanical schools. It was my pleasure to be shown the Technical School here in Cincinnati. I cannot tell you, gentlemen, how gratified I was when I was told this school was an out-growth of this National Association.

Now, gentlemen, isn't that something to be proud of? In Philadelphia we have had similar institutions for years. In our Girard College there is a mechanical school, and we have others. It has also been introduced into our public-school system of Philadelphia, through the efforts of some of our friends with the Legislature of our State; among them our friend Mr. Harkness was appointed. The committee appointed by the Legislature when they came to the city thought they could get through in half a day; but, after looking over the situation, they concluded to adjourn, saying they would come down and spend a couple of months in talking it over.

Mr. President, and Mr. Toast-Master, I wish to say the National Association should feel honored and exceedingly gratified with the reception tendered to us by your Exchange, and not only your Exchange, but by the citizens of Cincinnati. We have resolved to hold our next

annual convention in the city of Philadelphia. I don't know that we can do as well, but if you come and give us a trial we will do our best to return the hospitality you have so freely tendered us.

On the conclusion of President Stevens' response, at the suggestion of a visiting delegate, the banqueters arose to their feet and drank the health of Mr. Stevens.

The restriction limiting the number of corporate members to 100 was found to be a serious handicap to the ultimate success of the Philadelphia Exchange, and to remedy the evil Franklin M. Harris, on March 27, 1888, as chairman of the Committee on Membership, asked the Corporation to define definitely what qualifications were necessary to become a corporate member of the organization. It was stated that any person or firm that deposits his or their material at the building and does not erect it should be classed as dealers, and should not, therefore, be eligible for corporate membership, and that persons or copartnerships practically engaged as employers in any of the constructive mechanical trades, or as manufacturers of material necessary in the erection of buildings, may be eligible for corporate membership. It was also decided to increase the limit of corporate membership from 100 to 200.

Time after time and year after year have architects and builders clashed because of the indifferent manner in which estimates have been invited and contracts awarded. It was the Master Builders' Exchange of Philadelphia that first proposed a remedy for the evil.

At the meeting held on April 10, 1888, a resolution was adopted respectfully requesting the Philadelphia Chapter of Architects to appoint a committee of five architects, to confer with five master builders, to consider rules, conditions and suggestions tending to establish a code regulating the receiving of estimates and the awarding of contracts in the building trade of Philadelphia. These committees were duly appointed and held several meetings, and finally agreed upon a most excellent code of rules which the Master Builders' Exchange adopted as a whole, and which the Philadelphia Chapter of Architects approved.

The members of the Master Builders' Exchange expected to and were willing to abide by every provision of this code, and did so to the best of their ability. The architects, however, did as they liked in the matter, and as a consequence the building trade of Philadelphia, involving a total expenditure of \$30,000,000 annually, is without a recognized method of procedure.

The Mechanical Trade School project received its first practical support on April 24, 1888, when Colonel Richard T. Auchmuty, of New York, signified his willingness to give \$9000 to the support of such a school, if established by the Master Builders' Exchange, and brick-laying should be one of the branches taught. Of this sum \$3000 was to be paid annually. This offer was accepted on May 8, 1888, and the following committee was appointed to take the matter under consideration: Stacy Reeves, George Watson, Franklin M. Harris, Fred F. Myhlertz, William Gray, George W. Roydhouse, John J. Weaver, William Smith, Joseph Chapman, Charles Gillingham and William Harkness, Jr.

After the question had been thoroughly discussed the following preamble and resolutions were adopted :

WHEREAS, If we desire to have skilled American journeymen in the future, we must instruct the boys of to-day, and, as the apprentice system, especially in large cities, is practically obsolete, and from results already shown, we welcome the trade school as its worthy successor; and,

WHEREAS, Colonel Richard T. Auchmuty, the founder of the New York Trade Schools has generously offered to contribute the sum of \$3000 per year for three years towards the support of a Mechanical Trade School in this city, if it be established under the auspices of the Master Builders' Exchange,

Resolved, First, that the very generous offer of Colonel Richard T. Auchmuty is hereby accepted with thanks.

Second. That a Mechanical Trade School Committee of three members of the Exchange be appointed from each of the following trades: Bricklaying, carpentry, stonemasonry, blacksmithing, painting, plastering, plumbing and other trades in connection with building, as the necessity may arise, for the purposes of establishing a school in which instructions shall be given in each of the above-named trades.

Third. That, in order to give Philadelphia a chance to promote this laudable enterprise, a subscription list be started at once, and not only the various trades but citizens generally who may wish to aid in this good work of enabling the boys of Philadelphia to secure a trade, and thus earn an honest living with their hands, are hereby invited to contribute to a fund for the establishment and support of this, "The Philadelphia Builders' Mechanical Trade School."

Fourth. That the treasurer is hereby authorized to receive contributions for the above fund, and is instructed to open a separate account for the same.

On September 25, 1888, the Committee on Membership reported that it had divided the corporate membership into eleven classes and that all candidates for corporate membership in the Exchange would have to be engaged in at least one of the trades mentioned in the eleven classes, as follows:

Class 1.—Bricklayers, stonemasons and cellar diggers.

Class 2.—Carpenters and stairbuilders.

Class 3.—Heaters, ranges, grates and ventilating.

Class 4.—Wrought and cast-iron work and locksmithing.

Class 5.—Painters, paperhanglers and decorators.

Class 6.—Plasterers and artificial stone pavements.

Class 7.—Plumbers, gas and steam fitters.

Class 8.—Roofers and galvanized-iron workers.

Class 9.—Stonecutters and tile workers.

Class 10.—Manufacturers of brick, terra cotta, lime and cement.

Class 11.—Manufacturers of mill work and elevators, and lumbermen who deliver lumber to the building.

The Exchange ratified this proposition without a dissenting voice.

Plans for the new building, or rather the remodeling and enlarging of the old Gas Trust Building, were ordered after a long discussion as to the extent and kind of improvements desired.

It was reported that an earthquake had caused considerable damage to the property of the Builders' Exchange at Charleston, S. C., and \$50 was voted in their aid.

George W. Roydhouse, Joseph B. Cooper, John J. Weaver, Henry R. Coulomb and Francis F. Black were elected delegates, and William Harkness delegate-at-large to the Third Annual Convention of the National Association of

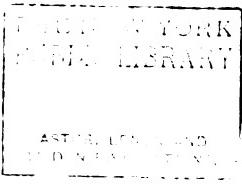
In Memoriam.

1888.

JOHN M. LUTZ,
February 26th.

JOHN C. SAVERY,
August 1st.

RUDOLPH J. WATSON,
December 28th.



Builders to be held in Philadelphia, on February 12, 13 and 14, 1889. The alternates elected were: Edmund Webster, John O'Donnel, Robert C. Lippincott, Howard B. French and William B. Irvine. At this same meeting, on motion of David A. Woelpper, it was agreed that all retiring presidents of the Exchange who serve their full term of office shall be considered advisory members of the Board of Directors, but shall have no vote.

The bids for the work upon the new Exchange building were opened at a special meeting held on January 14, 1889, and the contract was awarded to John R. Wiggins, whose estimate of \$48,358.92 was the lowest received.

IV.

The annual meeting of the Exchange held on January 22, 1889, was taken up principally by the reports of the various committees. That of the Building and Legislative Committees included a review of the work done toward securing a permanent home for the Exchange and the enactment of certain legislation for the benefit of builders. The Finance Committee reported that the Exchange was in an excellent financial condition, having \$30,920.88 in assets over liabilities, and everything seemed to indi-

cate continued financial prosperity, the certificates of membership being worth \$262.04.

It was reported that twenty corporate and thirty-five non-corporate members had been admitted during the same period, making the total membership 250. of whom 130 were non-corporate and 120 corporate. The average daily attendance for the year was sixty-eight.

After the transaction of the regular business President Stevens declined renomination, saying:

GENTLEMEN:—Through your kindness I have had the honor of being president of the Master Builders' Exchange for the two successive years of its existence, and, now as we are about to enter upon the third year, I feel it my duty for many reasons to decline a re-election to this important office.

First.—Because there are many other gentlemen who are quite as competent, and far more deserving, who only need the responsibilities imposed by the office, to serve you quite as faithfully as I have.

Secondly.—If nothing happens to prevent, I expect to be absent from the city during the coming year, and possibly longer, therefore, I could not serve you.

In retiring from the cares of office I must congratulate the Exchange upon its present

prosperity and the outlook it has for the future. As you remember, we were chartered February 17, 1887. The first meeting was held January 25, 1887 with seventy members; we now number 250. Our growth has been steady and satisfactory. What was started as an experiment has developed into an assured success.

It is not necessary for me to rehearse what has been accomplished, for that is evident to all.

We, as a body of mechanics, have taken our place among the various organizations and exchanges that represent the prosperity of the city, and have willingly been assigned a place second to none by the press of our city, its officers and citizens generally.

As we believed from the first, it only needed an assertion of our claims to have them fully recognized, and to-day our usefulness is only in its infancy. By a proper adherence to the principles upon which our organization was established, we will make membership in this organization "an assurance to the public of skill, honorable reputation and probity."

In retiring from the presidency of this association I would be false to my convictions if I did not publicly express my appreciation of the labors of your Board of Directors, who have so unselfishly given largely of their time, talents

and business experiences for the benefit of the Exchange.

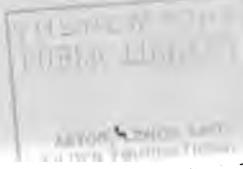
To the members I return thanks for their uniform courtesy and ready acquiescence when demands were made upon them.

We are looking forward hopefully to the meeting of the National Association of Builders in this city in February next, when, as guests of our Exchange, we feel assured they will experience a taste of our Quaker City hospitality which will make them wish they could be with us always.

Gentlemen, I again thank you, one and all, for the many honors you have conferred upon me, and wish for you and the Exchange a happy and prosperous New Year and many of them.

It was ordered that a suitable set of resolutions, thanking Mr. Stevens for his valuable and faithful services, be secured and presented to him, with the kindest wishes of the Exchange. Franklin M. Harris, William McCoach and William Harkness, Jr., were appointed to have the resolutions engrossed.

The following gentlemen were elected to serve on the Board of Directors for three years: Franklin M. Harris, John Kisterbock, Samuel J. Creswell, Maurice Joy, John E. Eyanson, Murrell Dobbins and William B. Irvine. Jacob





DAVID A. WOELPPER,
PRESIDENT, 1889.

DAVID A. WOELPPER.

One of the best and most favorably known men about town is David A. Woelpper, the second President of the Philadelphia Master Builders' Exchange. He comes of one of the oldest families in the Spring Garden district, in which he was born January 25, 1838. He possesses the advantages of a good common school and academic education. At the age of seventeen he entered the employ of his father, who was at that time a member of the firm of Brown & Woelpper.

About 1870 David A. Woelpper was taken into the firm, and some ten years later his father severed his connection with the firm and a reorganization was effected, which included Clay Kemble, a son of William H. Kemble. This partnership continued until 1885, when the affairs of the concern were wound up and Mr. Woelpper became sole proprietor of the extensive lumber yard and sash, door and wood-working mill of David A. Woelpper & Co.

He was chairman of the first meeting of the delegates from the various organizations who formed the Master Builders' Exchange of Philadelphia, and occupied that position until the permanent organization was effected, when he was elected First Vice-President. He has taken an active part in all movements likely to benefit the organizations to which he belongs. He has represented the Master Builders' Exchange of Philadelphia at every convention of the National Association of Builders since its first annual meeting, at Chicago in 1887. He was the foremost promoter of the scheme to organize the Saw and Planing Mill Association and aided in organizing the Lumbermen's Exchange of Philadelphia, of which he is now president. He is also an active member of the Manufacturers' Club, one of Philadelphia's leading social and commercial organizations.



R. Garber was elected for two years to serve out the unexpired term of William C. McPherson, who resigned his membership in the Exchange on December 27, 1888.

At the meeting held on January 31, 1889, over which David A. Woelpper presided, the plans prepared by Wilson Bros. & Co., for the alterations and additions to the Seventh-street property were formally submitted and approved, and the Committee on Building was authorized to proceed in the matter.

The Third Annual Convention of the National Association of Builders was held at the Franklin Institute in this city on February 12, 13 and 14, 1889, the first meeting being called to order at ten o'clock Tuesday morning, February 12, by John S. Stevens, President of the National Association, who introduced Hon. Edwin H. Fitler, Mayor of Philadelphia, who said :

MR. PRESIDENT:—I have a pleasant duty delegated to me, and that is, as chief magistrate, to welcome to our City of Brotherly Love the members of the National Builders' Association of the United States, and to tender to them the hospitalities of our citizens. If centuries of time add honor to a trade, then yours is an honorable one. While the product of

other trades has fallen and crumbled in the dust, that of yours has resisted the rot and the rust of ages, for there is still left upon the face of mother earth the handiwork of your ancient predecessors. This annual gathering of your clans for the mutual exchange of thoughts and ideas is bearing its fruits, for you are keeping pace with the progress and march of improvements. The combustible building is giving way to the incombustible, in order to resist that destructive element, fire. The severely plain structure is being replaced by one of sculptured, graceful outline. Iron and steel and terra-cotta have become factors in construction, and all this is manifest in the magnificent edifices that are now rearing upward their beautiful proportions under the skillful hands of the builders of Philadelphia.

To me it seems that the great International Exhibition of 1876 was a revelation, and I date the revival in this city, in the decoration of our homes, in adding to our comforts and conveniences, and in the improvement in the style and beauty of our architecture, to that great event. Formerly we were satisfied with a plain and unpretentious building, but now the skill of the architect, of the builder, and of the workman is taxed to its utmost to produce designs and

results that will satisfy the advanced ideas of the people, and the day is not far distant when all structures will be erected with a view that the building shall protect its inmates, and not that the inmates shall protect the building.

I again, gentlemen, tender you a most hearty welcome, and, in closing, will say that there is plenty of room at the top of the ladder.

President John S. Stevens then addressed the Convention as follows:

GENTLEMEN OF THE CONVENTION:—On this, the third annual gathering of The National Association of Builders of the United States, it becomes my pleasant duty to bid you welcome to the hospitalities of the Master Builders' Exchange of Philadelphia.

Our honored Mayor has tendered you the freedom of our city and the cordial good wishes of its citizens. We all feel highly honored that so distinguished and influential a body has chosen this city for its place of meeting, and it will give us much pleasure to minister to your comfort and entertainment while you sojourn with us. Much of our time and attention must, of necessity, be given to the consideration of matters of great importance that will come before us for action, still we hope to have some little time for enjoyment.

It is not necessary for me to reiterate the objects that influenced the formation of The National Association of Builders or the causes that led thereto. These have been fully stated by my predecessors in office in their opening addresses at the former conventions; but I may be excused if I emphasize the thought that guided and influenced the originators, to wit, the establishment of uniformity and harmony of action, upon general principles, in all matters that directly affect the interests of contractors, manual workmen, and all concerned in the erection and construction of buildings throughout the United States.

The most important question with us, at this time, is, what has been accomplished in this direction?

To answer this query I will briefly refer to some of the subjects that have been considered by this body, and the action thereon.

First.—The “Uniform Contract.” The report of the committee will doubtless give you all of the particulars, but I may be pardoned for saying here that while we do not claim to have made a “perfect contract,” yet this one is far in advance of any that has been used heretofore in establishing equitably the duties and responsibilities of owners, architects and contractors.

It is to-day largely in use throughout the United States in the offices of many leading architects.

Then again, the intelligent discussions on the "Lien Law," on the preparation of a plan for "Permanent Arbitration," "Uniformity in Measurements," "Uniform Size of Brick," "Insurance against Accidents to the Public," "The Apprenticeship System," etc., etc.

Has anything been accomplished? I think you will answer affirmatively.

As regards the views expressed by the National Association on the apprenticeship system at its first Convention at Chicago, and again at Cincinnati last year, they seem to have taken hold of the public and been adopted by them. The press of the country has, in many leading editorials, discussed the subject and is busy molding public opinion. Already steps have been taken that look toward the early establishment of trade schools, and some of our public-spirited citizens are devoting their means in support of such enterprises. Notably among these I may be permitted to name Col. Richard T. Auchmuty, who, not satisfied with the good accomplished by his New York trade schools, which were established and are supported by him, has offered to the Builders' Exchanges of Boston and Philadelphia a very large sum of

money towards the establishment of such trade schools under the auspices of the Exchanges in these cities.

You have all heard of the princely gift of Philadelphia's honored philanthropist, Isaiah V. Williamson, who, with his millions, proposes to found a mechanical trade school, which, under the wise management of an efficient Board of Trustees, will accomplish a work that will associate the name of Williamson with that of Stephen Girard as a benefactor of American youth.

We are assured that we see here the beginning of a new era, fraught with beneficial results to the nation at large, that cannot be fully estimated.

We hope through the efforts of these schools, and the widespread influence of the public press, as well as by our individual effort, to encourage the American youth to see and understand the "nobility of labor," to make them feel that it is more honorable to be a good mechanic, earning good wages, than to be a poor book-keeper or clerk, on a mere pittance.

In a pamphlet written by Mr. J. Hampton Moore, of this city, in reply to Henry George's address on free trade, he forcibly says:

"The American youth is keen to seize upon the golden opportunity, American fathers are

proud of their sons, and the tendency is to train them to be professional men. You don't want your boy to be a laborer, you want to make a lawyer of him; another father turns his boy's attention to the ministry, and still another to medicine; in fact, anything is selected that will save him from the drudgery of mechanical or other laborious work. The effect of all this is bad; there is not room in the professions for all, and many become the satellites of capital, or fall by the wayside. Why is all this? Because the inducement to learn a trade or to do manual work is not sufficient. The father may have managed to work at a trade himself, and sustained his family, but he wants something more remunerative for his boy. This is natural; but, seeing that the professions were over-crowded, and that carpentry would pay better than medicine, young America would not hesitate to take the best-paying situation. I am free to say, I would rather be a bricklayer at five dollars a day than a lawyer or government clerk at two dollars."

Gentlemen, we look forward to the time when we will be no longer dependent on foreign labor in the erection of our buildings—the "birds of passage," as I have heard them called, who come here in the spring of the year

and return to their own country in the fall, taking with them our American money upon which to live in comparative idleness during the winter months, leaving behind them, too often, the seeds of anarchy, atheism, and communism in exchange therefor.

I am pleased to know that many of the leading workingmen regard the establishment of trade schools with favor. Some time since I read the opinion of many of them, as published in the press of this city, and I take the liberty of quoting one of them which has no uncertain sound :

Andrew Magill, President of the Journey-men Bricklayers' Protective Association, was of the opinion that the school will not have the least effect on the wages of the mechanics in this or any other city. "What this city needs," said he. "is a class of mechanics who are versed in all the branches of the trade. We have not many such now, and we can only expect to get them from schools where all the branches of the trade are taught. No mechanic should look on this school as a menace to his interests, as it will advance rather than cause a decrease of his wages. Philadelphia and all the big cities can well afford to have any quantity of young mechanics in them such as this school will turn

out. It will keep out the cheap labor of Europe and make the work and all the surroundings more pleasant. None of the bricklayers in this city need feel worried about their position."

Let us then, gentlemen of the Convention, encourage and aid in the establishment of trade schools, and it will not be long before we will have American mechanics to build with American materials our American buildings.

Our honored Secretary in his report will doubtless tell us of much that has been done during the year, of meetings arranged for and successfully carried out that have resulted in the formation of new Exchanges, reorganization of defective ones, and the infusion of new life into some that were already established. Early in the year a visit was made to Rochester and Syracuse. The President was accompanied by Secretary Sayward, Vice-President Tucker and Brother Eidlitz, chairman of our Legislative Committee. Their well-timed remarks and eloquent appeals did much to make our visit to these Exchanges pleasant and profitable. We spent a short time at Albany sowing seed that we trust may yet result in good to the builders of that city and the National Association.

On another occasion, visits were made to the Exchanges in Buffalo, Cleveland, Cincinnati,

Pittsburg, Wilmington and Newark, with, as we trust, profitable results.

Enough has been said, and I have detained you too long; we will now enter upon the business of our Third Annual Convention. The work before us is of great importance, and I feel assured it will receive, as it well deserves, careful consideration at your hands. (Applause.)

Letters were then read from Samuel C. Perkins, President of the Public Buildings' Commission; William I. Kelly, Chairman of the Building Committee of the Masonic Temple; William C. Houston, President of the Union League; Jacob Jones, President, and Samuel R. Marriner, Secretary, of the Carpenters' Company; Bailey, Banks & Biddle, and the Peerless Brick Company, inviting the delegates to visit the establishments under their control, which invitations were accepted with a vote of thanks.

During the second session of the Convention, the following paper on "Ironwork, Past and Present." by Samuel J. Creswell, of the Philadelphia Exchange, was read :

Although the subject of this paper has been announced to be that of "Ironwork, Past and Present." yet to do justice to such a wide range would occupy more time and space than I could give or you would be willing to grant. I must,

therefore, with your permission, confine my remarks to the present century, and in the main to a brief review of the methods of iron construction in the past fifty years.

Although iron has probably held its place in minor uses in building construction from very early times, yet in the modern sense of the term the use of iron for building purposes began with the present century. The first building in which iron was used as a radical feature was probably the fire-proof mill erected at Manchester, England, by Messrs. Phillips & Lee, in 1801, the beams and columns for which were made from designs of Messrs. Boulton & Watt.

The next great advance in the use of iron dates from 1827, when Mr. Eaton Hodgkinson began his well-known experiments to determine the strength of the cast-iron beams and columns at the establishment of Mr. Fairbairn, at Manchester. The result of these experiments was published in a form which made the use of beams and columns of this sort both practicable and satisfactory, and, until rolled beams of wrought iron were made, beams of the forms recommended by Mr. Hodgkinson were largely used.

In 1844, Mr. Fairbairn drew up a report in which the modern system of fire-proof construc-

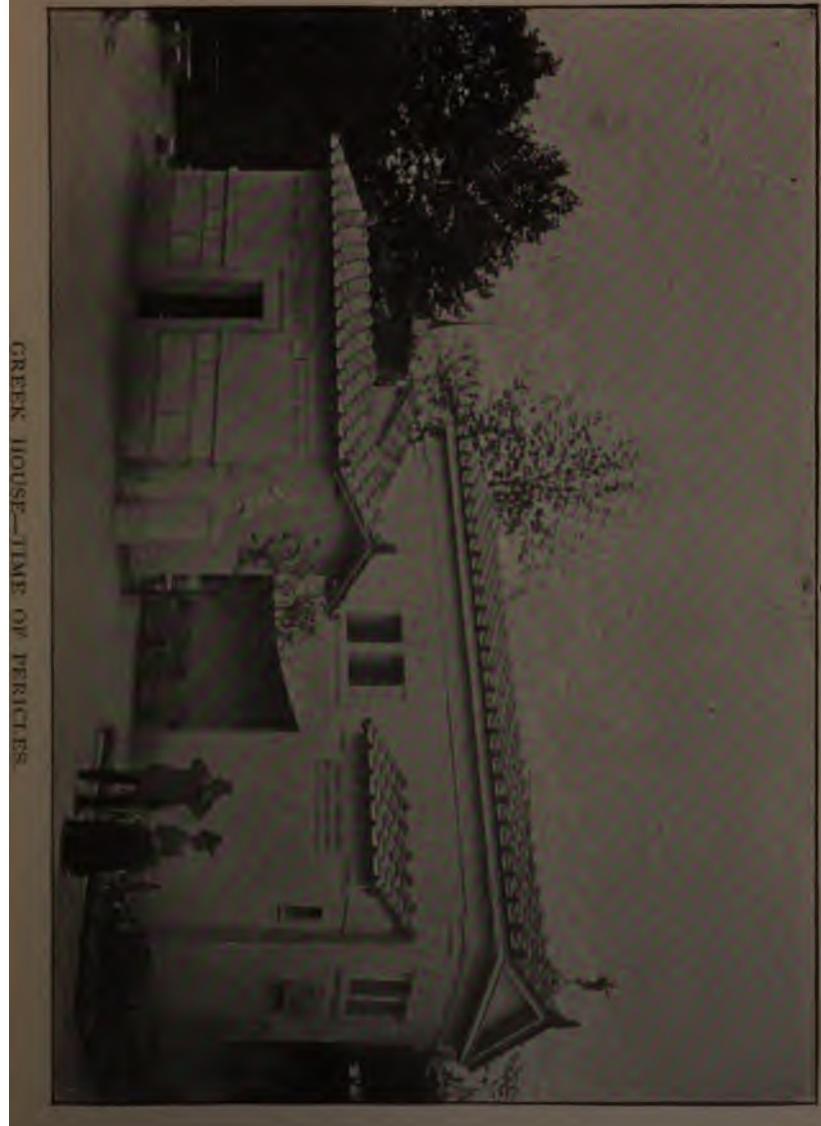
tion was described most completely. In this report we find the entire arrangement of cast-iron columns, wrought-iron beams, and brick arches springing between the beams to form the floor shown in detail, and also the application of corrugated sheet-iron arches to span the space between the beams, the floor being leveled with concrete.

He also advised the use of wrought-iron doors and shutters, and recommended that they be made double, with air space between.

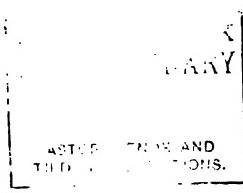
Mr. Fairbairn executed a number of buildings after his design, the most important being the great mills for Sir Titus Salt, at Saltaire. From that time the use of iron for building purposes became well established for manufacturing establishments, although its use was hardly considered admissible for buildings making much pretence for architectural effect.

The first iron front constructed in America is said to have been erected on the corner of Duane and Centre streets, New York, in 1847.

The use of cast iron for this purpose seems to meet with prompt appreciation in the United States, and its subsequent progress for commercial buildings has been so general that an enumeration of examples would be out of the question.



GREEK HOUSE—TIME OF PERICLES.



Coming back to England, the great exhibition in Hyde Park was held in 1851, in a building since world renowned as the "Crystal Palace." This building, composed almost entirely of iron and glass, was the design of Sir Joseph Paxton, and was suggested by the similar use of iron in the construction of conservatories. At that time it was confidently believed that a new order of architecture had been evolved, and that buildings of similar character would be erected elsewhere for other uses; but, although the erection of this structure marks an important era in the constructive use of iron, yet it was only suitable for special purposes. The so-called "ridge-and-furrow" style of roof construction, first used in the Crystal Palace, has often been used since that time for railway stations and other similar buildings, and possesses several points of advantage.

A far more important work in iron, from an architectural point of view, is the dome of the Capitol at Washington, completed in 1863.

Artistically speaking, it compares most favorably with the cathedral domes of Europe, while its magnitude, as a work in iron, makes it an epoch in building construction. It was constructed from the designs of the late Thomas U. Walter, contains over 8,000,000 pounds of iron, and cost \$1,250,000.

The great point in the successful use of iron in architecture lies in the choice of suitable and appropriate plans.

When designs for buildings to be executed in iron are prepared with a due regard for the character of the material, they may be made most consistent and effective; but many plans are imitated from buildings constructed of wood, brick, or stone. Where the capabilities and character of the material are duly considered, it is quite as possible to produce thoroughly artistic work in iron as in marble or granite; and, if these points are well considered, there is no reason why iron may not be regarded as artistic a building material as any other. One of the most elaborate iron buildings of recent erection is the conservatory attached to the residence of Sir Henry Bessemer, erected near London, in 1868, and, as an example of the judicious treatment of iron, it is worthy of careful examination.

Among the buildings in America the new Chamber of Commerce building in New York is worthy of mention as an example of the use of the so-called Bower-Barff method of rust prevention. As the tendency to rust is but imperfectly met by painting, unless it is frequently repeated, several methods of rust prevention

have been attempted. In 1876, Professor Barff discovered that iron when highly heated and exposed to superheated steam became coated with magnetic oxide, and thereby became rust-proof.

As a fitting close to this rapid sketch of the use of iron in building, the construction of the great tower for the coming Paris Exposition deserves mention. This tallest of buildings is to be 300 metres, or about 984 feet, in height, and is now being erected from the designs of M. Eiffel.

The plan of the tower is at once novel and effective, being composed of four curved members rising from the corners of a square whose sides are 300 metres (328 feet) in length. These corner members rise in a curve, and unite into a square tower of the immense height already given. The four corners of the square are joined by semicircular arches, and it is contemplated to enclose the ground floor of the tower for the purposes of a portion of the exhibition. The work upon it is being actively pushed, and it will doubtless be completed by the time announced.

This modern Tower of Babel is now more than 700 feet high, and in this unfinished condition it is higher than any existing structure, but,

even in this incomplete state, its effective character is apparent, and its architectural success is assured.

The plans of M. Eiffel were thoroughly examined by a board of engineers appointed for the purpose, and his calculations of strength and stability were thoroughly verified before the work was allowed to proceed.

Another example of tall construction is the twenty-eight story iron building proposed in Minneapolis; but this is only a project as yet, and its realization is not likely soon to occur.

Within a comparatively recent time there has been a notable increase in the use of structural iron in interior work, particularly with buildings of stone exterior. Instead of using the ordinary post-and-beam construction, clear lower floors are obtained by building truss forms into the main partitions in such a manner as to carry the load directly to the main piers, through iron members, without loading the partition walls. This construction makes it possible to adopt any desired arrangement of partition walls to suit occupants after the building is practically completed, and is virtually a new combination structure.

Examples of this are to be found among a number of the recently erected business build-

ings in Philadelphia, notably the Drexel Building, as well as some now in course of erection, and it is a plan that will doubtless be extensively followed hereafter.

Throughout all the changes and modifications which have taken place in the use of iron for building purposes, as briefly sketched above, there has been a constant increase in its application in connection with other materials, and also a more judicious distribution of metal in the various forms employed. Lighter forms are made of even greater strength than the clumsy patterns formerly employed, and a careful application of scientific methods has done much to advance this state of the art.

Whatever may be the opinion of men as to the artistic use of iron, there appears to be no doubt as to its fitness for use where strength and convenience are desired. In the shape of columns, beams and girders it fills many buildings where its use is not visible, and in this wide field it is destined, at least, to rank as the building material of the future.

The next paper read was by William H. Sayward, secretary of the National Association, on "Builders' Exchanges, their advantages and opportunities," which, because of its scope and importance, was ordered to be published in pam-

phlet form and distributed broadcast for the benefit of the building trade in general. Mr. Sayward in his address, said :

To those who have for many years been members of some of the well-established Exchanges of the country it may perhaps seem unnecessary to say anything in the way of demonstration of the advantages of such institutions, for the benefits experienced have become so much a part of daily business life that they are accepted as customary, as a matter of course.

To such I may say, you must understand that what seems to you an ordinary condition is, in point of fact, an exceptional one; and where the builders in one city are reaping the advantages of well-organized Exchanges for the transaction of business, the builders of at least two-thirds of the cities of the country have either no Exchanges at all or support organizations that, from lack of good methods of administration, are hardly deserving the name of Exchanges.

It is largely for the enlightenment and information of such builders as these referred to that I am to speak, and I must ask their more favored brothers to submit with patience while I recite the story which is so familiar that they may be tempted to call out "Chestnuts," and yet which may be a revelation to many others.

When I reach that portion of my subject which comprehends the "Opportunities of Exchanges" I apprehend I may have something to say which will at least be directed to all, even if I do not succeed in making it interesting or instructive.

The advantages accruing from the habit of gathering together in one particular place at specified hours on every business day are perhaps more certain and definite to builders than to men in trade, and yet builders have been almost the last among business men to establish this convenient and regular method of personal every-day contact for the transaction of business.

I want to state just here that by far the larger proportion of builders' associations in this country are *not* established upon this fundamental feature of an Exchange, viz., daily meeting at a specified hour for actual business purposes. They are not, therefore, in a true sense, Builders' Exchanges, although in some cases they bear that name, and they do not begin to realize the advantages they ought, or develop the strength which this daily contact creates and encourages. Boards of Trade, Chambers of Commerce, Merchants' Exchanges, have existed almost as long as trade has existed for the readier interchange,

or more properly, the *exchange* of business information.

Shakespeare, even, has given us a clew to an exchange extant in ancient Venice, for he makes Shylock speak of the Rialto "where merchants most do congregate."

In the first place, a Builders' Exchange is, or should be, a rendezvous, a common place of meeting for those engaged in the various branches of building, whose trades have to be prosecuted in conjunction with each other; also for those whose lines of business make it desirable for them to frequently see the contractors in various trades for the purpose of selling material.

Viewed simply in the light of convenience, this daily meeting together of men engaged in various branches of the building business carries with it benefits so obvious as scarcely to require reference.

But let us look for a moment at the **particular** reasons why these advantages are **greater for** contractors in various building trades than for other business men.

Merchants, men in trade, need to see each other daily "on 'change'" it is true, but besides that they have a local habitation, store, warehouse or office, where for the greater part of the



HINDOO HOUSE—300 YEARS BEFORE CHRIST.

HABITATIONS OF MEN. PARIS EXPOSITION, 1889.



day they expect to be on duty for the transaction of business and where others may be reasonably sure of finding them.

With builders the situation is radically different; comparatively few builders have shops and offices, and even for those who do, the necessities of building require their personal presence here, there and everywhere, wherever their work may be going on, and it is the exception and not the rule to find them at what may be termed their place of business.

By far the larger proportion of builders in the various trades have no shops even, for they do not need them, storehouses, or "lockers" as they are commonly called, meeting and filling all their needs, while their offices are in most cases in their homes, where they can use their evenings for "keeping books," estimating and other office work.

The more modern methods of carrying on the building business, however, are tending in the direction of separating the business from the home life, and I am very glad that it is so; offices are getting to be more common, and work that used to be done by weary hands and exhausted brains at night and in the home is delegated to others and to a place specially set apart. This is as it should be; but the other conditions

referred to must always prevail—the builder must superintend his work wherever it happens to be, and therefore must continue to be an unreliable individual as to his whereabouts, and all the more unreliable in proportion to the number and location of his various jobs.

It is this peculiar characteristic of the building business and the builders' practice which makes the common meeting-place of many men in the various trades in a city of the greatest advantage and convenience. It means, as the very first element of value, the greatest economy of time (and time to the builder, of all others, means money), for it goes almost without saying that the builder who needs to see various other contractors whose work is commingled with his, and yet who are as unreachable (with any certainty) as he is himself, finds the most complete saving of time in the rendezvous of the Exchange, where he and those whom he needs to meet personally, and who need to have the same personal contact with him, have established the custom of being each day at a definite time.

On the floor of the Exchange, at the recognized "change hour," the builders may be reasonably sure, on any business day, of finding those men whose work must be prosecuted along

with theirs, and whom they, in consequence, need to see to talk up some detail, or whose experience they wish to consult as to the feasibility of certain work, or whose estimates they want for immediate use, or whom they wish particularly to see without delay to correct some error, make some change, or hurry some particular portion. If one builder needs to see others for the quick consummation of many points in a short time, so they in turn wish to see him, and also to see others still, so that there is a perfect chain of convenience going on in endless combination, and yet without confusion.

I have spoken so far in a general way of the convenience which accrues to the various builders by their being able to see many of their collaborators in a single hour, to accomplish which by any other means would occupy many hours, perhaps days. There is still another class of men whose lines of business bring them closely in contact with builders, whose interests are directly catered to by this daily congregation. Dealers in material find here their very best opportunity to meet the men to whom they wish to sell their goods. In the limits of an hour and within the walls of one room they are sure to find every day, or nearly every day, the men whose trade they seek.

The accomplishment of so much personal interviewing in any other way—and none of the modern conveniences of telephoning can take the place of it—would mean miles upon miles of travel, and hours upon hours of disappointment. In the economizing of time for the seller there can be no such sure recipe as the Builders' Exchange.

The presence of the seller, too, is in turn a direct advantage to the builder, and much time and patience are saved by the opportunities offered for personal explanation, so persistently needed in the purchase of the goods the builder uses.

The common meeting-place, then, once established as a daily habit, becomes as indispensable as any other of the many conveniences which aid the transaction of business and assist in the many movements of life.

The question may be asked, "Cannot I get along without it?"

Yes, one can "get along" without it, and can "get along," too, without many of the helps which experience has raised for the advantage of the world. Anyone who chooses can "get along" without using the steam transportation which now whisks him over the continent from the Atlantic to the Pacific in as short a time as

it formerly took to travel from Maine to New York. He may, if he chooses, "get along" in the old-fashioned stage-coach, but I imagine his journeying would be rather lonesome, and his feelings rather mortifying on arrival to find that, though he has "got there all the same," his competitors had "been there" and gone.

One may, if he choose, in these days of rapid concentration, "get along" without using the telegraph or telephone, and may send his messages by mail, taking an hour or a day, instead of a few moments of time, but I apprehend he will discover that it would be wiser to use the means that his contemporaries are using, and save unnecessary friction in the accomplishment of his designs.

One may "get along" without using the aids that machinery has brought to the various details of work. He may, for instance, plane all his lumber by hand instead of using the power planer; he may, in fact, refuse any and all of the "lubricators" which have been invented to ease and shorten labor, but by so doing he will "get along" painfully, and "get left," even though he "gets along."

So, too, one can "get along" without the Exchange, but it is a fact which cannot be disputed that he can get along much easier, accom-

plish much more in the same length of time, save travel, and avoid unnecessary labor by this very simple means. It is very amusing, and at

the same time somewhat annoying to those who have the management of the well-developed Exchanges, to receive quite frequent visits from some of the builders or dealers who assert so constantly and confidently that they can "get along" without the Exchange, and who, when reminded that they are getting the advantage of the rendezvous, say, "Oh, yes! I find it very convenient sometimes to run in here to find people whom I must see without delay," sublimely unconscious, all the while, that they are paying the highest tribute to the utility of the Exchange idea, and apparently unmindful that in the occasional benefits they derive from the certainty of finding people at a definite place and at a definite time, they get for nothing what it costs others money to provide.

Nothing is more fallacious than the idea that the relative value of an Exchange to the individual depends upon the frequency of his visits and the length of time he remains there.

The value of the postal service, the police service, the fire alarm, or any of the departments maintained for the general good is not demonstrated simply by the *number* of times

that they are utilized every day, but by their *certainty of operation when needed.*

The individual who uses the Exchange but once or twice during the week may secure the same degree of advantage which the constant attendant gets; that is, he gets, when he wants it, the convenience which it is important he should have.

However seldom during the week or month or even year the intermittent member uses the Exchange, it is always there ready for use, and the group of men are where he can put his hand upon them whenever he may need them.

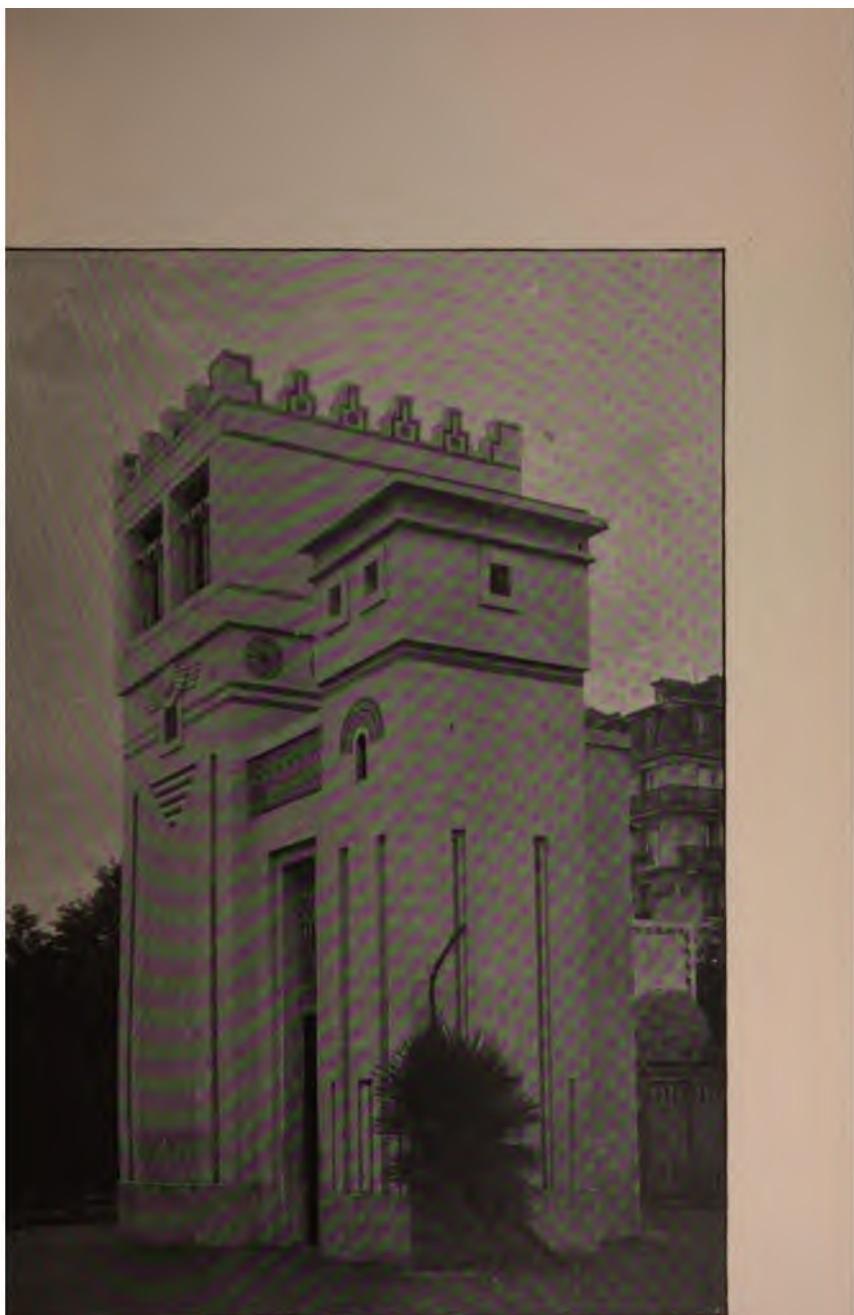
It would be impossible to state in figures, with any degree of accuracy, the *value* to any individual of the Exchange rendezvous, any more than the value of banking privileges and conveniences could be so stated; to-day the individual may get absolutely nothing from the contact; to-morrow he may secure a definite advantage, that may mean hundreds of dollars. In my personal experience I recall one occasion when the Exchange in five minutes' time was worth \$5000 to me; and this is but a suggestion of many other *unrecognized* helps.

I have endeavored to outline briefly the Exchange idea and what it means in a very practical way, simply from the standpoint of

convenience, with its resultant economy of time; but I must not omit to say something in regard to the administration of the Exchange and the many ways in which convenience may be ministered to and the Exchange made attractive.

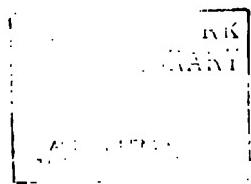
To simply have a rendezvous need not mean more than the barest and most meagre of accommodations; in fact, it might be only a meeting place upon the open street, the same as years ago in Boston the mechanics first established the custom of meeting "upon 'change,'" in humble imitation of the merchants, who also were without a habitation, and found the sidewalk a satisfactory place of meeting. What these ancient men used to do on rainy days, or when the storms of winter made it not only uncomfortable but impossible to use the public street as a place of meeting, I am not informed, but it is a fair inference that some shelter was obtained, which probably was a suggestion in itself that it would be worth while to have a permanent cover for pleasant as well as stormy weather.

The Exchange, in its management, or "administration," as I like to call it, should be liberal, progressive! In and about the rooms, which are to be the business centre for so many people during so many hours in the course of



ASSYRIAN HOUSE.

HABITATIONS OF MEN. PARIS EXPOSITION, 1889.



the year, the comfort of those who are to occupy them should be a constant consideration. Appointments that shall comprehend all the improvements of the day should be freely placed at the service of members.

I shall take it for granted that the location of the rooms will be as central as possible in the financial business portion of the city, but will briefly say that a location which is good enough for a first-class bank or a board of trade is also a good neighborhood for a Builders' Exchange.

Light and air are said to be very cheap; but, though this saying may be true enough in its original application, it is truer still that they must be vigilantly sought and persistently striven for.

Two things should be considered indispensable in locating an Exchange, viz., good light and favorable opportunities for ventilation. It is very unfortunate when, for any reason, the rooms selected for an Exchange are dark and "stuffy." There can be no reason satisfactory enough to warrant such selection, and I say very decidedly that until these two fundamental features can be secured, we would be better without the Exchange. I say this with the more freedom because I know that it is always

possible to obtain these important *desiderata*, and there can be no excuse for neglecting them.

Money will always secure proper quarters, and there should certainly be no niggardliness in the selection of a home which shall have these requirements of comfort, or be susceptible of such alteration as may secure them.

A good location obtained and opportunities for light and air secured, the next thing should be to utilize them and make the place attractive and refreshing to all who enter the doors. It is true that it is a place for business, but it need not be any the less cheerful on that account. It will need constant, daily attention to keep the apartments in cleanly condition, but it will pay!. The merchant, the banker, the architect, the owner, who visits the Exchange will not fail to be favorably impressed if they find everything ship-shape. See that care is taken to have the rooms presentable at all times, with windows washed, floors scrubbed, brasses polished, and every nook and corner cared for. Visitors will be unfavorably impressed in proportion as these things are neglected; but it is more in behalf of the members themselves that I urge attention to these details of order and cleanliness, for I am convinced that they are elevating in themselves, and the more one is accustomed to

them the more distasteful will untidy ways become, while personal habits even will be unconsciously controlled by the constant suggestion of better things in one's surroundings.

The sanitary and toilet arrangements should be as perfect and complete as in any first-class hotel, and should be kept fresh and wholesome by daily care.

Too much cannot be said of the value of these two items of administration, and the appreciation of them can only be measured by the extent to which they are taken advantage of in well-ordered Exchanges, or by the outcry which would be made if these luxuries should be discontinued.

Individual letter boxes for mail matter and messages for members are indispensable, and should always be under lock and key. When possible, "lockers" large enough to hold a roll of plans and some personal effects should be provided, also under lock and key. Writing-tables, supplied with stationery and writing materials, are, of course, indispensable, and should be kept, the same as all else in the room, in the best and freshest conditions for use by constant daily supervision.

The telephone service should be of the best; and in this, as in every other modern device

made use of, the management should keep abreast of the times, by having all improvements as rapidly as they are presented.

In fact, without particularizing further, everything that members can possibly expect to find in such a place should be obtained, of the very best sort, and the management should be constantly on the alert to anticipate wants and provide such accessories as will put Builders' Exchanges on a par with any and all others.

There is really no such thing as completely stating all that can be done in this direction, for new demands are constantly springing up, and they should be gladly met as indicative of growth in the right direction, as evidence that builders have ceased thinking that "anything will do" for them, and have found out the advantages of an Exchange.

The various things which I have mentioned help to emphasize the convenience of the common meeting-place, and, when once realized, will not be readily relinquished. To secure all these advantages there will have to be liberal expenditure, and to make this possible there should be no narrow ideas in the matter of the annual assessment upon each member.

It should always be borne in mind that the practical, every-day benefits of which

spoken, and to which I have confined **myself**, are not the only ones to be provided **for, and** yet these alone are sufficiently valuable **to warrant** a payment by each individual much **greater** than he will ever be called upon to make.

The aggregate expense of running **an Exchange** upon liberal principles may be **large, but** the expense to the individual will be **light, and,** in comparison with the benefits received, **may** be considered as absolutely insignificant. **There** can be no greater mistake made than to **scale** down the annual assessment to a figure **so low** that the only wonder is that any **assessment at all** should be made.

That which costs little or nothing is seldom of any value, and those who would make desirable members will soon appreciate the fact that the assessment is not of a character to increase the desirability of the institution. I shall have more to say on that point later on. Make the advantages of meeting together and the conveniences with which you surround yourselves so evident that membership with you will be sought almost regardless of expense.

These institutions should not be run as money-making machines either, but rather as money-spenders, so long as there are legitimate ways in which the interests of the whole may

be fostered and cared for; and as long as the building business exists there will be field enough for this sort of work. Of this, too, I shall speak in the other branch of my subject.

Turning now from the consideration of the practical advantages of the Exchange as a business rendezvous, I wish to say something of other things none the less practical, but of a character so little developed or understood that they may be spoken of at present as unimproved opportunities.

No portion of the business community has ever needed the studying of uniform methods more decidedly than the builders, and none have been so absolutely without them. No kind of business has needed **so urgently** the blessings of system in its contact with others as the building business, and yet of all others it seems to have been the most uncertain and aimless, therefore the most imposed upon.

The very character of the business seems to invite irregularities, and its multitudinous complications make the situation an extremely difficult one. This condition, which in itself has been and is *likely* to be vexatious enough, has been and is rendered still more serious by the fact that a large proportion of the building trade has been illly trained in the fundamental

principles of education, and consequently is exceedingly crude in business ideas and business methods. Coming largely from the working classes, so called, they have been, by the circumstances of their birth and the necessities of their environment, deprived of the opportunities which sharpen the intellect and prepare the nerves for the conflict of business life.

It speaks well for the native worth of the men who have made the building business honorable and successful, when we consider the obstacles which have been overcome, but we find an explanation, in this fact of lack of business training, of much that has burdened the builders of the past, is still burdening the builders of to-day, and is likely to be a factor in the conditions of the future, although great changes for the better are bound to flow from the more general education of the people and the efforts which we as builders and as intelligent business men are making for the benefit of ourselves and our contemporaries, as well as for the future builders of the country.

Here, then, is the field of neglected or rather unimproved opportunities which the Builders' Exchanges of the country should look upon as their particular province of usefulness, and to cultivate which the relations which they have

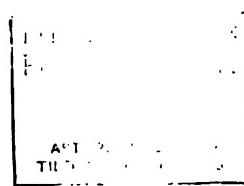
established with each other, primarily as a matter of convenience, will develop into the very best foundation for practical and permanent results.

Stated concisely, the opportunity is this: The establishment of system; the maintenance of uniformity and concert of action; the definite statement of just and proper methods, which shall develop a "practice" to serve as a guide in all controversies, whether they be between builders themselves, or between builders and the rest of the world, to the end that builders may know readily and precisely their rights in the premises: the providing of means whereby irregular and improper practices may be checked and dishonest methods punished: in short, the standing upon guard, as it were, for the general interests of the whole, and through that the interest of the individual, with the same watchfulness that is exercised for the comfort, convenience and protection of those who come into the shelter of the Exchange rooms for the transaction of business.

Brought together at first simply for the purpose of securing convenience in transacting business with each other, a relation is established which makes possible at once that united action which alone can bring about reforms or



MAHOMETAN HOUSE.
HABITATIONS OF MEN, PARIS EXPOSITION, 1889.



establish definite methods and practices. The purposes and desires of the individual are inoperative until a sufficient number of other individuals not only think the same, have the same purposes and desires, but *act* in concert with him to the end that there may be a definite result.

To secure any decisive end, it is necessary to consult together as to the best course of action to secure it, for it is very evident that though many individuals may desire the same thing, if left to follow out the idea each in his individual capacity and from his individual standpoint, the worst sort of confusion would ensue, and the end sought for would not be attained.

The Exchange idea, utilized primarily for a purely business purpose, creates a certain community of feeling, establishes a common interest, accustoms the members to each other, puts them gradually *en rapport* with each other, makes it seem natural to act together, puts them "into condition," as it were, easily and almost imperceptibly for the exercise of that cumulative force which alone produces appreciable results for the general good.

Men who are in the habit of doing business together, who meet each other day after day, are the very ones to hold up each other's hands

in the pursuit of any object for the benefit of the whole, and it is a natural sequence that it should do so.

All work which I am now considering under the general head of "opportunities" might be called "Association work," as distinctive from "Exchange work," but both departments need the sinews of war, and while the collections may all be made through the Exchange, the amounts called for should comprehend a large expenditure, if necessary, under the head of "Association work."

The "sinews of war"—yearly assessments! It is on this rock that many associations "split," and if they do *not* split, they are stranded and comparatively helpless. As I mentioned before in treating the other branch of my subject, this question of the funds necessary for the carrying on of association work must be looked upon in broad and liberal fashion.

Associations should not be entered into with the expectation that the return is coming somewhat in the same way that it comes from an investment in bank, railroad, or real estate, yet a large majority of men are staggered by a yearly assessment at all commensurate with the importance of work undertaken, crying out, "I can't see any return for my money." I feel

assured that if they thoroughly investigate the ultimate gain that comes to them in the protection to individual interests through aggregate combined action of which they form a part, and which their stipend helps to sustain, they will no longer exclaim, "I want dividends on my investment," but will say rather, "I am not paying nearly as much as I ought for the good attained for the whole, and in which I am an individual gainer."

It would be hard to state definitely in dollars and cents the gain that is to result from any one of the objects which we are gathered here to promote, yet the dullest mind must admit that the gain to the whole community of builders will be enormous, while the share of benefit which each individual will receive is as impossible of definite statement as it is positive in fact!

It is a well-worn maxim that "republics are ungrateful," and it is equally a truism that members of associations are ungrateful, and quickly forget what has been *saved* to them, in their anxiety to get a dividend back, from "dues" which they should really look upon as payment altogether insignificant in proportion to the benefits derived. All this argues from the premise of a properly managed association pro-

ducing good for its members, protecting their interests. To secure this sort of an association, it must be a permanency and always in active service. Ability must be at the helm, and must be properly remunerated for constant service.

I am convinced that but few business men have anything but a superficial idea of the purposes, possibilities and legitimate work of associations. They look upon them as a sort of special arrangement to meet a special emergency, and when that crisis is past, that the association may be permitted to languish, to be revived again when some special demand again calls for special action. Such spasmodic attention to the machinery will, to my mind, greatly depress its vitality, and will ultimately destroy its reliability and facility of movement.

It is the most natural thing in the world for men to pursue their individual callings, conscious all the while that many evils exist which will be detrimental to their interests some time or other, but relying upon their good luck to provide for them a way of escape for the present, and as long as they do escape they appear to be content. But evils will not remain at a standstill, and if neglected are sure to increase, while "good luck" cannot always be relied upon. Discretion, therefore, would seem to point to

keeping everything in readiness for action and to making a study and a business of eradicating evils !

Associations should be treated in the same way that any regular department of work is treated—in a business-like way ; associations, in fact, should be made a business ! For this reason the Exchange proper, with its constant life and action for the support of a condition favorable to the transaction of business, furnishes the best possible basis for active and effective *association work* ; the bearings, so to speak, are all oiled and the wheels ready to set in motion ; no waiting for the preparation of machinery is necessary : it is always ready and can be put into service at a moment's notice.

Conditions that encourage evils furnish also the opportunities, if not the absolute duties, of associations.

It is time for something more than negation : we should not occupy ourselves solely with saying *this* is wrong and *that* is wrong ; we should have foresight and wisdom enough to *prevent* wrong by preparing better methods and by establishing the *right*.

That we may take this advanced and positive ground, we must have competent hands and brains to work for us, for the bulk of the mem-

bers in every Exchange and association must perforce be busily engaged in carrying on the manifold details of work, and therefore should delegate certain preparatory study and work to others. This kind of service is needed all the more now that we have a central organization which plans the work and specifies and recommends the methods best to be followed, leaving the details to be carried out by the filial bodies.

There is enough, yes, more than enough, to do, and the loyal children of this great National Mother must recognize their duty to her and their opportunities for themselves by carrying out through men specially selected by their fitness for the work the many things there are to do and always will be to do.

To get such men they must be properly paid, and the money will be well spent, for a single brainy man may, by his alertness and skill, stop a leak that, neglected or unseen, would bring untold disaster to many.

Such men are the surveyors and engineers who carefully examine the ground on which and over which we are to build, and, foreseeing dangers, prepare a way to avoid them—to be approved and sanctioned when laid before the association for action. These are the men upon whom we must rely for the *making a business of*

association work, who are to labor when the rank and file of the membership are closely engaged in their private affairs ; they must do the studying, prepare the ways, suggest the methods, and get things into definite shape for others to act upon : the others haven't time ! Protect yourselves, then, by having men in your service whose business it is to *find* time and to improve it for your benefit.

Let no one say, "There is not enough to do." I have been there, and I know there is—plenty ! But if you want a definite suggestion, let me say right here, that there is one subject which for many years is sure to be large enough to warrant the best of work, the closest care and watchfulness of the best men that each of the affiliated bodies can secure—and that is, the apprenticeship plan approved by the National Association of Builders.

And I will say, also, although it is not directly called for by my subject, but in answer to those who question the desirability of this National body, if it has nothing else to do but the complete establishment of this system, in that alone is there warrant enough for all the time, for all the money, for all the brains that can be put into it for the next twenty years to come ! And if for the central body this is true, then is it equally true for the local bodies !

One of the results to follow from the greater activity of Builders' Exchanges through improving their opportunities will be a greater prominence in the eyes of the public, and the value of builders as men of affairs will be recognized as never before. Their desirability as practical men in positions of public need, where their experience will tell for the general good, will be continually before the communities in which they live, and they will not be so often forgotten in the future when men are being chosen to fill important places of trust, when their peculiar qualifications demonstrate their fitness.

One of the reasons why laws, ordinances, and regulations of all sorts, from the tariff down, are so often ineffective or ridiculously opposite in operation to the intent of those who framed them, is, that men of experience in the particular questions treated have not been utilized in their consideration. I had occasion a few days ago to examine one section of the tariff in order to give an opinion on the application of the law to certain facts, and found, to my astonishment, that, owing to certain ignorant use of terms with which any intelligent builder is perfectly familiar, and which he could have properly supplied, the very purpose of the law was defeated.

With the immense amount of constructive work which our communities must always under-



JAPANESE HOUSE.
EXPOSITION OF MÉS. PARIS EXPOSITION, 1867.



take, the practical help of builders, with their dearly bought experience, is needed ; and our Exchanges and associations must keep the public familiar with the men we have among us fitted to meet the public necessity.

I can remember perfectly how, when my father (who was one of Boston's old-time mechanics) was elected on the school committee, a great commotion was raised among certain people, who exclaimed, "What do we want with a mechanic on the school committee?" And I remember with a great deal of satisfaction how one level-headed old fellow on the board replied (probably with some recent occurrences in his mind), "We want a mechanic on the committee so that when we build another school-house we won't have to tear it to pieces to get the stairs in, and won't have to pull up the drains because they pitch into the house instead of toward the sewer."

It is through association with each other that men and their abilities become known, and a good, live Exchange of Builders in a city, an Exchange which takes an interest in the affairs of the municipality, and does not hesitate to let the public *know* that it is alive, will soon make a reputation for itself as one of the institutions of the place, and its members will be sought for

when their special qualifications are needed for performance of public duties.

Great works jeopardized because of incompetent men placed in authority have been common history for many years. This should be different : we should bring our men to the front, make them known, and say to the public, "When you have great practical work to be done, don't fill up the commissions with lawyers and professional men. but put a proper quota of mechanics on the board, men of experience in this character of work, and money and honor and reputation will be saved and the general interest prospered."

Already has the tide turned in our direction.

When that honest, fearless mayor of the great metropolis—himself a builder—looked about him for a man to put upon the Aqueduct Commission who could not only be trusted as an *honest* man but because he was competent, through his long experience in mechanical work, to be in such a position, he came to this National Association and took one of its prominent officers. Mr. John J. Tucker, of New York. We all know that he made no mistake when he made this selection ; and it should be our determination to encourage the following of this example by every means in our power, and one

means is that which I have cited, namely, making our Exchanges prominent features in our cities, making their influence felt, and by building up a proper respect for the individuals which form them as citizens worthy to be recognized in everything that is undertaken.

This leads me, very naturally, to one important suggestion which I desire to make before closing: I am thoroughly convinced that the very best thing that Builders' Exchanges can do to advance their interests in the communities where they exist, and put their affairs upon a substantial basis, is to purchase a building, or purchase land and build one, suitable for their occupancy, and in which they can, perhaps, accommodate other interests connected with building.

My reasons for these are many, but I will state only a few of them:

In the first place, no body of men acting as a corporation for investment of money in real estate can begin to handle a piece of property to such good advantage as an Exchange of Builders, who, while supporting their place of meeting for the transaction of business, and getting their full money's worth for every cent of their assessment, however large it may be (and here let me remark that but few Exchanges in

this country have yet educated themselves up to a proper point in yearly assessments), will have a good balance on hand every year to carry over to the building account, and, almost before it seems possible, the debt, if there be any, will be wiped out and the property owned, free and clear. It is a good business transaction, and in time will place the Exchange in command of money from rentals to apply to the many things it will always find opportunity for doing. Then, again, it gives you at once a standing and respectability in the community; it is an effective way of keeping in the eye of the public, and establishes you as a landmark.

I was very much amused the other day, and pleased too, when a builder from Connecticut who came to Boston for the purpose of consulting me upon Exchange matters, told me that he thought he would test our standing in the city and find out whether we were widely known. so, as he stepped from the train, he asked a policeman where our Exchange was, and without a moment's hesitation the officer gave him a complete direction. Not content with this, he purposely asked another and another of the men he met, and every one knew exactly where we are located; even the fruit venders corners gave him correct answe

to the conclusion that we were the best **known** of any of the societies in the city.

We own our building, and it is becoming **more** and more of a landmark every day. Philadelphia has followed our example, and I say **to you all**, "Go and do likewise." If you are **located** in a prosperous and growing city you cannot **fail** to make a good investment, and the **property** will largely increase in value on your hands.

In addition to these reasons, to own **your** building creates a sense of proprietorship **among** your members and fills them with an **interest in** common which always seems to accompany the ownership of property. It is a good **solidifier**, a good anchor.

But I must not say more in this direction.

Before closing I give you this word of caution about membership: Always consider quality more than quantity; do not strive for great numbers, but excellence in those you have as fellows. It is a safeguard both in times of peace and times of danger, and will facilitate the management of your affairs in whatever direction they may tend. With large numbers you must remember that the difficulties of management increase in geometrical proportion, and unless the quality is carefully watched, you may find yourselves handicapped by a super-

abundance of unthinking members, who will defeat your attempts to do any of the worthy and important things that the National body is to-day recommending.

Gentlemen, I have tried to make this address short, but have succeeded in making it too long, I fear, for my hearers. The fact of the matter is, there is no place to stop; it is all virgin ground, and there are constantly new and interesting specimens springing up which demand attention. I have tried to confine myself to general statements rather than to make them specific, for the reason that I should have been still more prolix had I attempted to take up too much in detail.

Hours, for instance, might be spent in showing how important an opportunity associations afford for treatment of labor matters, or in describing courses of *action* which comprehend the interests of the whole as paramount to personal interest. Much time, too, might be spent and worthily spent, in describing and defining the methods and system which should guide builders in their relations with each other and in their relations with architects and owners, in the matter of estimating and carrying out of contracts, etc., etc., but it is not the province of such an address as this to particularize.

In conclusion, I might say that the opportunities for Exchange or association work are being developed, materialized, put into definite statement by the National Association in the best and most effective way for the largest results to be realized.

Let each local association hold up the hands of the central association to the highest level best to carry out the principles approved by it, and it will no longer be necessary for its own needs, to have a portion of the National Association in the chain that binds us all together!

A. S. Reed, of Washington, D. C., in asking for information as to what kind of school would be used in teaching a boy to be a bricklayer in a trade school, invited most lucid and entertaining descriptions of the plan from President Stevens and Assistant-Secretary Harkness. Mr. Stevens said :

I have my ideas on that subject, and I will express them. You want to know how we would teach a boy to be a bricklayer in our school. First, I would have a man to teach him by lecture all that could be taught him in regard to his business, or the materials connected with it; for instance, I would have the lecturer tell the boy what sand is made of and

all about sand; I would have him tell the class what lime is made of and how it is made; I would have him tell the class what bricks are made of and how they are made; I would have him tell them all about cement and explain to them its nature and combination. By the time the boy was through with those lectures he would know why you could not make mortar—I am an iron man, and I do not know much about bricklaying, but I will tell you all I know about it—the boy would then know why you could not make mortar out of ashes and lime, or out of lava and lime. He would know why you had to use gravel and why you had to use sand.

After this has been taught to that extent, I would have them taken to a limekiln and let them have a first lesson—let them see how lime is made. I would have them taken to a brickyard, and let them see how bricks are made. I would have them taken to a cement establishment, and let them see how cement is made. I would suppose that some station was concerned, the construction of which was completed theoretically.

Now comes the question, "What shall we do next?" I would have, then, a first-class journeyman bricklayer



CHINESE HOUSE.

HABITATIONS OF MEN. PARIS EXPOSITION, 1889.



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—such a man as you would make one of your foremen to take charge of your buildings—and I would have him take these boys, a class of say six or eight or ten, and say to them, “Boys, you have been told by your teacher how mortar is made; now I am going to show you.” Then he would call up his laborer, and say, “Here, Billy, bring so many bushels of lime, and so many bushels of sand;” and he would bring them and put them down on the ground. Then the teacher would tell them, “Now, when you put water on this lime, it slacks it. Now, we are going to put water on this lime and we will see it slack.” Then he would mix that up, and it would make mortar, and he would be talking to them, and all the time they would be seeing. That finished, he would say to the boys, “The first thing you have to learn is how to use a trowel. Here are the trowels. Now, William, you put a shovelful of mortar on each one of those boards, and each one of you boys take a trowel, and I will show you how to spread this cement and mix the mortar,” and keep the boys practicing at that, and say, “George, that is not the way; do it this way.” They would soon learn how.

The next day he would go there, and say, “Boys, I am going to build a wall for you, and

I want you to see how I do it." He would dig out, and commence to lay it out, and talk to the boys as he went on: "Boys, we spread our mortar this way; we take up our bricks this way; this is the way we put a header; we run up three courses here and three courses there, and we use this plumb-bob to see that it is plumb, and then we strain a line over this way and lay a number of bricks in proportion. That is the way we will do it." Then he would tell the boys how he was going to strike the joints. He would build that wall with those boys looking at him. "Do you understand that, boys?" "Yes." Then he would say, "William, have this wall torn down and everything cleaned up. Now, boys, to-morrow morning we will go to work;" and then the next morning he would say to the boys, "I want each one of you to lay out a wall as I did yesterday. You saw me do it, and I want you to do it." They would start in, and he would watch them. "John, don't pick your bricks up that way: this is the way. Bill, you are not doing as I showed you: run that corner up and run this up. George, that is not the way to hold the plumb-bob: hold it this way, and strike your joints this way."

Do you think those boys would learn anything? I think in six months' time I would

make pretty good bricklayers out of those boys. After I had taught them how to put a wall up I would take them on pressed-brick work, and I would teach them how to turn arches ; and I think those boys would learn more under six months' instruction of that kind than they would in six years in your building with nobody to tell them, and left just to pick up what they could.

After some timely remarks on the subject by other gentlemen, Mr. Harkness said :

We started the Master Plumbers' Trade School five years ago, for the purpose of instructing our apprentices. The idea was that the masters could not give the apprentices the time to instruct them in their trade, they were so busy, and the journeymen would not instruct them, and the apprentice was left practically to his own wits to find out how things were done. The trade school was started with the idea of merely instructing the apprentices of members of the association, and no others. It was perfectly within our own control. We did not admit any outsiders at all.

We started in two classes, which met on Tuesday and Friday evenings; one class was instructed in drawing, while the other class was taking practical instruction in manual work. In the first place they were furnished with the

tools and materials necessary in their business. When a boy entered the shop he was taught the various names and composition of metals, their qualities, and other matters pertaining to them, and he was given pieces of pipe and solder, with a journeyman plumber to instruct him in the making of joints. He was first given the making of a round joint. The first one that he made was saved, and he went on with his instruction until the end of the term. Then he was required to make another round joint, so that we could compare the two and give him an average on his advancement in construction. He was also required to make a branch joint, a wiped seam, and different matters of that kind, and also beating up trap. That was the practical part of the work.

In the drawing class he was instructed in making straight lines, in drawing plans for gas pipe; and, by the way, some of the boys can excel the journeymen at the present day and make better drawings than the journeymen, and—I am informed—they are often employed by their masters to make drawings to be sent to the gas office.

In addition to this, imperfect drawings of the drainage system were placed on the black-board, with the request that the boy ~~make~~

them according to his ideas. While in one room a class is taking a drawing lesson, the other class is taking a practical lesson in another room. The school is open Tuesdays and Fridays, so that we reverse the teaching—the class that takes the practical lesson on Tuesday evening takes the drawing lesson on Friday evening. After the drawings are turned in, one of the committee of plumbers having charge of the school advances to the black-board and explains to the boys where the defect is.

In addition to that, we give the boys each evening ten questions to answer in regard to our business. It is really surprising to see the advancement the boys have made in their trade. It has been a benefit not only to the boys but to the masters themselves.

One of the gentlemen spoke here about the boys being first put, when they go to a trade, to sweep out the store, and take the keys, and make the fire. That was one difficulty we had to meet. The American boy is opposed to that kind of business, and he will tell us at once that he came to learn a trade, and not to sweep the floor. This trade school takes that place, and the boy is practically of some use the moment he goes to the trade. He is in reality working at the trade while he is taking

the lessons at our school. He is an apprentice boy. We are teaching our own apprentices. In addition to the schooling we are giving them, they are also working at the trade during the daytime. Our school is open only two evenings in the week. We are giving them the **education at night** that we ought to give them during the day.

The question of apprenticeship and trade schools was thoroughly covered in the address of Colonel Richard T. Auchmuty, of New York, who delivered the following address before the convention :

However desirable it may be that there should be a wide acquaintance among those who follow the same callings, however pleasant the annual meetings of this organization may be, particularly when hospitality is so thoughtfully and lavishly offered as it is here, it is not for social purposes that these conventions of the National Association of Builders are held. Neither do you come together to consider how work can best be done. Valuable essays may be read, but the discussion of such subjects can wisely be left to local organizations or to the columns of the trade papers.

You have come from all parts of the United States to consider such matters as pertain to the

conduct of your business, and which can only be determined by concerted action. Such subjects as the position you are to hold to those who employ you and to those you employ; the best means of guarding against unfair dealing, or against such competition as, under the guise of reducing the cost, lowers the standard of workmanship; the establishment of a regular form of contract and providing for a specification which conveys the same idea to all who work by it, and, far from least in importance, the best method of training the youth of this country in the mechanic arts. These subjects concern you all. In dealing with them as individuals you can do little, while dealing with them as an association all that is reasonable and just can be accomplished.

At meetings, then, held by business men for business purposes, those who speak should discard theory and confine themselves to what they know. I have been invited to come here to-day to give my views on training young men so that they can not only become mechanics but mechanics worthy of this country. This invitation has been extended to me because it has been my fortune—and I use that word designedly, for I consider it has been a privilege rather than a task to have rendered aid to the class of young

men who have sought my help—because it has been my fortune, I say, to have given instruction in the building trades to nearly 2000 young men. I have heard their needs when they came to my schools, watched their progress while they were there, and endeavored to ascertain their success after they left. One must be dull indeed who had observed nothing or gained no experience during seven years passed in such work.

Let us see who now do the skilled work of this country. In the building trades we have mechanics from England, Ireland, France, Italy and Germany, and we have mechanics who are our own countrymen. Each nationality usually follows some particular trade. In New York, for instance, the stone-masonry is mostly done by the sons of Italy; Englishmen and Irishmen lay the brick. When the heavy work of putting on the beams, or of framing and placing in position the roof trusses, begins, seldom an English word is spoken; the broad shoulders and brawny muscles of the German furnish the motive-power. Irishmen and Americans in about equal numbers do the carpenter's work. In the plumbing trade, where science is as needful as skill—thanks, perhaps, to the interest the master plumbers have taken in the plumbing school—our own countrymen will soon have control.

Where delicate artistic work is required we find the Frenchman and the German. In all the trades, except the plumbing, we find that the best workmen, those who command the steadiest employment, are of foreign birth.

If we see but few American mechanics at work on the buildings in our large cities, still smaller is the number of boys who are learning their trade. Those who are to fill the vacant places are learning how to work in other lands or in country towns. The 'prentice boy was once a feature in city life. Strict rules were enforced by trade associations in regard to him, which were intended to make sure he became a skillful workman. Equally strict rules are now enforced, but they are devised not to make the lad a good workman, but to keep him out of the trades.

I need not take your time in giving a history of the apprenticeship system, as it has passed away, and, to quote from the report on apprenticeship adopted at your last Convention, "there is no encouragement for its revival." The old system ceased to exist; it became impossible when the master mechanic ceased to work with his men and when modern methods of conducting business required that labor should be subdivided. Then not only was the apprentice

l of the personal care of his master, but workshop ceased to be a place in which a trade could be thoroughly acquired. So important is it in a well-conducted workshop that each workman should be kept at what he can do best that it has come to be recognized that the larger the workshop the less chance the boy has of learning a trade in all its parts. There are workshops where, as in the Baltimore and Ohio Railroad Company's shops in Baltimore, a capable instructor is appointed to look after the lads, to see that they pass through each branch of the trade they are learning and to explain to them details that otherwise would be difficult of comprehension; but such a plan would not be practical on account of its expense in the average shop.

In modern times has grown up the custom of hiring a boy to make himself useful, with the understanding that he is to learn his trade in part payment for his services, by observation and by such practice as he can get. A bright boy, if he happens to meet with a kind foreman and friendly journeymen, may learn a great deal in this way, but the chances are that he will be employed on what he can do best, and that he will not be allowed to injure tools or waste material in trying his hands on difficult

work. If the surroundings were favorable the lad might become a good workman when his "time" was served; if unfavorable, he might waste four precious years, and not only not be a good mechanic, but be unfitted for any other occupation. Chance should form no part in an educational scheme, certainly not in an industrial educational system. All that the lad is likely to have with which to fight the battle of life, when he becomes a man, is his skill; its acquirement should not be a matter of chance.

If, then, the master mechanic is no longer able to give much personal attention to his apprentice, because his time can be more profitably spent in his office than in his workshop, and if the workshop, owing to the subdivision of labor, is no longer the best place to learn a trade, some other system of training the young mechanic must be found. That system would seem to be afforded by the trade school, where trades are taught precisely as the professions are now taught in professional schools.

Trade schools, as you know, although a modern, are not an untried invention. France owes much of her wealth to her industrial schools; Germany has wrested a considerable portion of the American trade from England by her trade schools, and the London guilds are

xpending their accumulated wealth in the establishment of similar schools throughout England. The foreign trade schools are of two kinds, those where a trade is learned during the four or five years required to obtain a good education, and schools where young men employed in shops can learn what the workshop does not teach.

In this country the lad's education can be left to the public schools. What is wanted is some place where he can learn a trade after he has finished his education.

The practical man, whether he be a master mechanic or a journeyman, will be likely to say that it is not possible to graduate a mechanic capable of doing first-class work from a trade school. This need not be discussed. To attempt to graduate journeymen from a trade school would be both expensive and unnecessary. The trade school can teach, far better than the workshop, a trade in all its parts. More than that, it can teach what no workshop pretends to teach, the science on which a trade is based, and which is in danger of being forgotten. Speed of execution and the experience necessary to meet the varied problems ever presented to the mechanic can only, on the other hand, be acquired at real work. It is therefore the

combination of the trade school and the workshop that offers the best results; the trade school first to learn how to work, then the workshop to gain speed of execution and experience.

Let us now examine the working of a trade school to understand what the system is on which it is conducted and its results.

I will take the courses of instruction followed at my own trade schools as an example, because I am familiar with them.

A young man wishes to be a bricklayer. He can enter the bricklaying class at the New York Trade Schools, if not under seventeen or over twenty-one years of age, on payment of a fee of \$20, provided he looks respectable and is strong enough to do the hard work which will be required of him. The circular of the schools states, and he is also told, that the instruction he will receive will not make him a journeyman, but that he will require about six months at real work after leaving the schools to gain quickness and to learn how work is conducted. The instruction is given the bricklaying class on three evenings each week for five months, from 7 to 9.30 o'clock, and every day from 8 A. M. to 5 P. M. for two weeks more at the close of the term. No one under seventeen

age is admitted, as the instruction is not adopted to boys, and none are taken, except in some exceptional case, over twenty-one, as it would be extremely unpopular with journeymen to do so. There is a great demand for instruction in bricklaying from laborers and hod-carriers. Large fees are offered, and often pathetic appeals to be allowed to enter the schools are made. It might be said that there is no reason why such men should be precluded from bettering their condition in life ; but the New York Trade Schools were established for the benefit of young men, to free American young men from the traditions of the past and the cruel restrictions put upon their learning how to work by our foreign-born fellow-citizens. This is a sufficiently large undertaking without complicating it with other issues.

After the young man has paid his fees he is given a ticket. This he takes to the tool-room, and receives in return for it a trowel. At the close of each evening's instruction he returns the trowel (properly cleaned) and receives back his ticket. Provision is made for the care of overalls, plumb-rules, etc. The course of instruction is divided into a series of exercises, to each of which a specified number of evenings is given. This course of instruction is printed

and hung up in the bricklaying shed, so that each member of the class may understand what will be expected of him. Before commencing an exercise, the instructor, standing on a platform, shows the class how the work should be done, and explains why it should be done in a certain way. Then the young men endeavor to do what has been shown them, and the instructors—there being one to each twenty-five young men—correct them when they are wrong and explain what they do not understand. The first evening is spent in learning how to handle the trowel and spread mortar. The mortar is spread on boards, no walls having yet been built. Then come three evenings on eight-inch walls, working to a line, but without using the plumb-rule. During this time the pupils are required to spread mortar over at least two bricks, to bond properly and strike the joints neatly. Three evenings more are given to eight-inch walls, when mortar must be spread over at least three bricks and the wall pointed. After the eight-inch walls, twelve-inch piers are built, and the use of the plumb-rule is taught. Then twelve-inch walls are built for six evenings, twenty minutes each evening being occupied in spreading mortar, the young men being cautioned that they will be judged when they get

wo considerable extent by the way they hold their trowels. Then follow piers again; then eight-inch walls without a plumb-rule, so as to train the eye; then twelve-inch walls with a chimney-breast and flues; then eight, twelve, and sixteen-inch walls turned at right angles and with intersecting walls; then come arches, with two and three "lock courses, and then the class is again on straight twelve-inch walls, being passed each of places, set sills, windows, practise corbelling, and work again on twelve-inch walls.

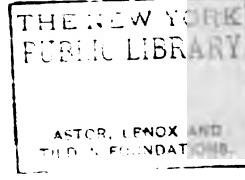
Instruction is also given in mixing mortar, cement and concrete, in laying and leveling foundations, in the principles of the arch, the construction of flues, and the strength of walls; besides short lectures on these subjects, manuals are distributed for future reference. The two weeks' day instruction from 8 A. M. to 4 P. M., with which the course closes, is a repetition of what has already been done, with the exception that one hour each day is passed in laying brick on a twelve-inch wall as fast as it can properly be laid.

The sequence in which the different exercises are arranged and the amount of time given to



RUSSIAN HOUSE.

HABITATIONS OF MEN. PARIS EXPOSITION, 1889.



each are the result of a careful watching of the progress of the pupils since the bricklaying class was started. The bricklaying shed measures 120 feet by 40 feet. The foundations for the walls and other exercises are permanent, there being fifteen of them. From five to six young men, according to the exercise, work on each foundation. The work done during the evening is pulled down by laborers the following day.

The care the young man has received is, as you will readily see, far greater than he could possibly get at real work. He is encouraged to ask for information, not discouraged by sarcastic remarks or criticisms. Whenever he does work improperly he is not only obliged to do it again, but he is made to understand why his way was wrong. The scientific instruction I have described is never taught on the scaffold. If learned at all, it is usually learned by experience, for which the owner must suffer or the contractor pay.

When the six months spent in this way are over the young man can lay about 600 brick per day on a straight wall; he can do almost any work that is required of the average bricklayer, but, except on a straight wall, he will work slowly and will need watching. I have, with careful figuring, found him to be worth from

\$1 to \$1.75 per day assuming a journeyman's wages to be \$4.00. Although the trade-school graduate cannot work fast, he is thoroughly grounded in his trade; he knows why he does his work in a certain way, consequently he improves rapidly. I have employed very many of these young men during the past five summers, and I have found, while desiring to protect my own interests, as well as to be just to them, that at the end of a month or six weeks, if strong and active, they were worth \$2.00 per day, and, later on, from \$2.50 to \$3.00 per day, always assuming that full wages are \$4.00 a day. When my buildings were finished, at the end of five or six months, the young men usually got full wages from their employers. The work upon which I have employed the graduates of this class is shown in the photographs I have with me of the five-story apartment house on 9th Avenue and of four dwelling-houses on 68th Street in New York. I usually employ each year from twenty-five to forty members of the bricklaying class, and from two to four journeymen to build for me. During the past two years a large portion of my face-brick work has been done by journeymen who were former graduates of the schools. The buildings have been erected for

investment, not for sale. As to the quality of the work, I can refer to the committee from the Philadelphia Builders' Exchange who inspected it last spring. I have been engaged in building, either as an architect or for myself, for thirty years, and the most satisfactory work I have had was done by these trade-school graduates. They put their hearts as well as their hands to their work, and, like the builders of old, did the unseen as well as that which was seen.

The same system of first explaining how work should be done and then requiring the young men to do it, is followed in the plumbing, painting, plastering, stone-cutting, carpentry and blacksmith classes, with the exception, that, in the bricklaying class, all must work at the same exercise, while in the other workshops a pupil is advanced only as fast as he can do each exercise satisfactorily to the instructor.

In the plumbing class very great attention is also paid to the scientific instruction. This scientific instruction is given by means of lectures and frequent examinations. When a subject is to be explained, like trapping, ventilation of drain and soil pipes, boilers, etc., each pupil receives a set of printed questions relating to it.

The lecturer reads out one of these questions and writes a concise answer on the black-board. The young men copy this answer in blank spaces left in their printed forms between each question. The lecturer then further explains the question and illustrates his meaning by diagrams on the black-board. These questions and answers are retained for future reference.

At the close of the plumping course a very strict examination is held by the Trade-School Committee of the New York Master Plumbers' Association. The young men are required to show what sort of work they can do. They are then given a series of printed questions on the scientific branches of the trade, which have already been explained in the lectures. The young men must write answers to these questions in a given time, in the presence of the committee and without referring to their notes. Then they are required to correct diagrams of faulty work, many of them taken from drawings of improper work that has been done in New York and which were published in the technical papers. When this examination is passed, the like of which has never before been attempted in any trade, the young men receive a certificate from the Master Plumbers' Association, which is highly prized, as it is often a passport to employment.

Besides the evening plumbing class, which is composed largely of "helpers," who come to the schools of their own accord and at their own expense, to gain the knowledge they know cannot be had in the average shop, there is at the New York Trade Schools a day plumbing class, held during the three winter months. This day class is attended by young men from all parts of the United States, few of whom have any knowledge of the trade when they come. At the present time there are fifty-two young men in this class, fourteen States and Canada being represented. The fee is \$35, and, in addition, those who come to New York must pay their board and traveling expenses. Two of this winter's class paid \$60 each for their journey across the continent from California.

In addition to the course of instruction prescribed for the evening class, which is also followed by the day class, these young men are given instructions in lead burning, in drawing and bookkeeping, and they are required to fill up the blank specifications prepared by the Board of Health of New York for an ordinary city house. Said the president of the New York Master Plumbers' Association, when examining the work of last season's day class,

"skill is simply marvelous." In this day class there are usually a number of master plumbers' sons. A distinguished visitor asked a young Missourian a few weeks ago why he had come all the way to New York to learn plumbing. He replied that his father was a master plumber in St. Louis, and that as his brother, who had attended the New York Trade Schools last winter, was now doing some of their finest work, his father had sent him to the school this season.

One of the evils of the present plan of hiring a boy to make himself useful, with the understanding that he is to pick up a trade, is, as I have before stated, that it is a matter of chance how much he learns. **The same evil might** result from trade-school instruction, because at the school the young man himself would decide when he knew enough, and there would be a tendency to arrive at that conclusion very speedily, unless, as is done in the plumbing class at the New York Trade Schools, some means should be taken to ascertain how much has been learned.

The young plumber who could make a first-class wipe-joint might think he had finished his education, and the bricklayer might suppose that spreading mortar and laying brick was all

he needed to know. It would, therefore, seem to be evident that if a new plan of trade education is to be introduced some system must be followed.

The necessity of a new apprentice system was recognized at your first annual Convention, held in Chicago, in 1887. The resolution offered by William Harkness, Jr., of Philadelphia, states that "the old system of binding apprentices to the different trades has fallen into disuse." The resolution offered by J. Milton Blair, of Cincinnati, was that "the restrictions now existing in the matter of the number of apprentices allowed by the present labor organizations be modified, as they are unjust both to the employer and employe; and that manual training schools be instituted and fostered by the various Exchanges and trade organizations." Your declaration of principles states "that a uniform system of apprenticeship should be adopted by the various mechanical trades." Said John S. Stevens, of Philadelphia, we should "educate and have American mechanics who shall do the work of this country." Said Mr. W. L. B. Tenny, of Chicago, "It is not in the manual training school that we raise journeymen; we want an apprentice school." I do not quote what your Secretary has said on this subject.

for in this good work, as in much other work for the benefit of the building trades, "None can less have said, or more have done."

At that Convention, your first Convention, a committee to formulate a system of apprenticeship suited to the present time was appointed, consisting of Messrs. Marc Eidlitz, of New York, Leander Greeley, of Cambridge, Mass., and William Harkness, Jr., of Philadelphia. The report of this committee, made to the Convention held at Cincinnati last year, and the resolutions which were unanimously adopted, if carried into effect, are likely to be memorable in trade history not only in this country but throughout the civilized world. Not only is what remains of the dead past swept away, but a system is proposed so simple that no difficulty can arise to prevent its adoption. So just to master, to journeyman and to lad, that there can be no opposition to it, unless arising from a desire to exclude the lads from the trades ; so wise that it cannot fail to make American mechanics worthy of their name, and will be likely to make American citizens worthy of their country. The plan adopted, as you all know, was that a lad who wishes to be a mechanic should go first to a *mechanical trade school* to learn the science and practice of his

trade. After this is accomplished and he has obtained a certificate of proficiency, under rules approved by a committee of master mechanics, he must "serve a term of practice with an employer on actual work." No length of time is fixed, and wisely, for this term, but it is expressly stated that it shall be at least one year shorter than the term now usually required. During this "term of practice" the young man shall be known as a "junior," the word "apprentice" being omitted as "misleading." Finally, "the completion of the education of the mechanic is to be acknowledged by the issuance of a certificate from the Association of Builders to which the employer may belong, which shall entitle the holder to be received by all builders as a journeyman." I would add that, if your experience is like mine, you will find when this system is established that your workmen are your friends and that they will recognize the fact that your interests and theirs are the same.

The report accompanying the resolutions of your Association also states that, although the trade schools will at first need to be started or fostered by the master mechanics, it is reasonable to suppose that private enterprise can be relied upon to supply the demand for trade

instruct after it has been created. This **report and** these resolutions were drawn up by **practical** business men. As practical men let us see how the first condition, the establishment of trade schools, can be brought about.

The establishment of a trade school need not be looked upon as either difficult or expensive. Some unoccupied workshop, or some vacant plot of land on which temporary buildings could be erected, would give shelter. A committee appointed by the Master Builders' Association, of three members for each of the trades in which instruction is given, could manage the school. The course of instruction, the manuals, etc., used at the New York Trade Schools are at the disposal of those who may care to use them. Doubtless they can be much improved, but they will do for a beginning.

I would advise that not more than two or three trades be taught at first. Bricklaying, plastering and carpentry produce the speediest results. Instruction in plumbing is of the utmost importance in large cities, but I doubt the expediency of starting plumbing schools in small towns. It will not be necessary to raise much money. After shelter has been provided, two or three thousand dollars will equip the school and meet the first demands. Such an

amount could be easily raised. The Merchant Tailors' Society of New York raised \$7300 in a few days to maintain a tailoring class in my schools.

The fee should meet the running expenses, for when once it is known that the trade school is the entrance gate to the building trades, any reasonable fee required to cover the expenses will be readily paid. It is better for the young men that they should pay the cost of their instruction. Except in the case of the helpless, charity is misplaced and demoralizing. The evening bricklaying class at the New York Trade Schools will pay expenses with seventy-five members at \$20 each. The cost of instruction and the waste of material in the day plumbing class, with fifty pupils at \$35 each, and in the evening class, with one hundred pupils at \$12 each, will be met. A fee of \$12, with twenty-five pupils, will cover the cost of the evening stone-cutting class, and \$16, with forty pupils, the cost of the classes in carpentry and plastering. In addition to the expenses of each class, there must be a considerable outlay for salary of clerk and janitor, for the cost of fire, lights, printing, etc., but a very moderate increase of the fees charged at my schools would also meet these expenses and make the

s self-supporting. I cannot make too plain the fact that the young men do not want charity, but that they will gladly pay whatever is reasonable, and will save up their money for the purpose, provided they feel sure that after they have finished their training they shall be at liberty to dispose of their labor for what it is worth, and that they have the same right as is accorded to Castle Garden.

all that association do will be to have the same right when he leaves right is recognized, mechanics need advice. Private industry is ever ready to inations and give private enterprise, as was which in this country any good work, or colleges, will do the rest.

I do not think too much attention can be given to the class of young men from whom the trades are to be recruited. Young men are wanted in the trades who have been carefully brought up, who have had a high-school or even a scientific-school education. The system adopted by your Association will give such young men a chance to become mechanics. Heretofore a lad who wished to learn a trade must leave school at fourteen or fifteen—at just the age he should be there. Years that would be precious at school must be passed in

running errands and in doing work but remotely connected with learning a trade. Respectable, well-to-do parents would naturally prefer that their sons should remain at school. It has come to be thought by the public that a mechanic does not need much education. It is said that a young man who has had a high-school education is lost to the trades ; rather might it be said that the trades have heretofore excluded such young men. Master mechanics send their sons to the New York Trade Schools from all parts of the United States. They wish them to be mechanics, but they also intend they shall first have had what all Americans need, a good education, which, if they entered the shops as boys, they could not get. If an errand boy is wanted, hire one ; teach him a trade, help him when he has learned it ; but do not say that none but errand boys shall become mechanics. If labor is to be held in honor, it must be educated labor. A calling is regarded according to the education of those who follow it. The man makes the calling respectable far more than the calling dignifies the man. The author of the "Bread Winners" describes the secret anger of a carpenter who was not spoken to or even noticed by the rich man in whose library he was working. The employer in this

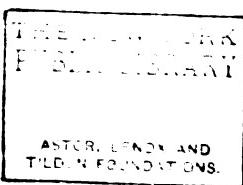
try in the mechanic arts, to teach them not only how to get an honest living but how to get the highest price for their labor. The Union leaders may tell you that the narrow limitation of the number of lads whom they allow to a workshop is intended to make sure that each youth has proper attention. Be not deceived: Commissioner Peck, of the Bureau of Statistics of Labor of the State of New York, asked sixty-five prominent Unions in that State if the Unions' rules required the employer or foreman to have the lad thoroughly taught. Forty-nine answers were received, of which only five were in the affirmative. One replied, "not interested," which, unfortunately, answered all.

It may cost you a struggle to accomplish this task: it will cost you more if you ignore it. What was done by the Master Plumbers' Association of New York and by the Builders' Exchange of Boston can be done by other associations. In asserting your right to employ young men you are asserting your right to manage your own workshops and to conduct your business without interference. When once this right is recognized you may, perhaps, find that you have gained the respect of those who will oppose you. No peace is of value which is based on wrong.



PHOENICIAN HOUSE.

HABITATIONS OF MEN. PARIS EXPOSITION, 1889.



Two magnificent endowments now exist in this city for industrial training. Stephen Girard provided for the orphan ; Isaiah V. Williamson is to provide for the poor. "The preference should always be given to the poor," reads the Williamson foundation deed. All honor to such men ! There is room enough for their benefactions, great as they are.

The master builders of Philadelphia have undertaken another work, which, like that of Girard and Williamson, will cause them to be held in honor. They have undertaken to bring into the trades the young men who graduate from the public and private schools ; the young men I have seen in the Philadelphia Manual Training School, of whom this city may well be proud ; the young men who have been brought up in their own homes in this City of Homes.

You, gentlemen of the National Association of Builders, have taken the first step in a noble work. The apprentice system you have adopted is just and wise. It can easily be carried into effect. The result will be immediate ; it will not be necessary to wait for some distant day to prove its success. If you will follow the path you have marked out you will gain for your Association public sympathy, which will help you in all you may undertake, and in every city

in United States thousands of young men who are now growing to manhood and thousands of those who come after them will call you blessed.

The address of Colonel Auchmuty was received with an enthusiastic outburst of applause and three ringing cheers.

Mr. A. J. Campbell, of New York, stated that he had been appointed the chairman of a special committee which had not been called upon to make a report, but the committee had attended to its duties, and it would give him great pleasure to now present certain badges to George C. Prussing, J. Milton Blair and John S. Stevens, the three ex-presidents of the Association, which he did, in the following language :

To the pioneers in every cause tending to benefit the human family, individuals and communities, sharing such benefits, owe everything pertaining thereto.

If there were no pioneers there would be no progress in human events; and if there was no progress the world would be a stagnant pool of indolence, brutality and chaos.

Thus it is that the men and women who make the history of States and nations are those possessed of active, expansive minds and broad views in this life.

The organization of societies, through which good works are wrought, works which bear the fruits upon which the minds of men are fed, nourished and expanded, are among the greatest blessings afforded to any order-loving, law-abiding, progressive people.

Organizations develop the strength, force and energy of a people when formed for the general good; but they are the bane of civilization when formed for evil and unjust purposes.

When formed to promulgate truth, to develop nature, to maintain law and order, to advance science, to promote and secure prosperity through the inculcation of just and sound ethics, and to work and solve the best problems of life, and to develop the best characteristics and phases of the human mind and heart, they are the concentrated force of good-will, and effective measures for securing the greatest sum of happiness for the greatest numbers.

You, gentlemen, have been some of the most conspicuous and most efficient of the pioneers, and have stood in the foremost ranks of the co-workers in the grand effort of organizing the society known as the "National Association of Builders."

This Association can now truthfully be classed among the many noble organizations which

abound in the land we live in as a grand success.

To you, gentlemen, has been accorded and conceded the title and distinction of being prime movers, sturdy advocates, hard workers in the initiatory tasks which were both necessary and difficult, as well as laborious and taxing.

A noble work has been accomplished, and, to a very great extent, owing to your energies and volunteer labor.

While a few penurious and narrow-minded persons, engaged in one way or another in the same line of business—the vast, enterprising work of erecting habitations for the people; great structures and lesser ones for business purposes; halls for promulgating the sciences, and churches for the worship of the Deity—have not lost an opportunity or occasion to protest by words and actions against this progressive work, and have not failed to withhold a mere pittance of a share in its financial support; you, gentlemen, have been foremost in the work, with labor and money, ready on call for such need.

The programme of business through which this Convention has just passed, suggesting, as it does, the benefits to be derived by the present and future generations, through the force and

impetus thus given to the beneficent ideas and plans, and from active and energetic agitations, having origin and being in and through this National Association of Builders, should exalt the pride and secure the commendation and aid of every man connected with the building interests of our people throughout the whole nation.

Every skeptic should be convinced that in every honorable calling there is a field of glory for himself if he will join hands in the good work.

I will not tax your time with more than this passing allusion to the work already done and the work to be done by this organization, through which so much promise stands out before us, and made manifest through the several addresses delivered before the Convention, and through the reports of the several committees relative to the important subjects submitted and considered so intelligently and creditably.

But I must return to the most interesting feature of the present moment, and again refer to the fact that you, gentlemen, have been deemed by your fellow co-laborers in the cause as worthy of some mark of distinction, in feeble acknowledgment of your active service, and the very high esteem in which you are held and beloved by them all.

It is, therefore, by assignment, my pleasant duty not only to have had the opportunity to refer briefly to the work and exalted purpose of this body of representative men of our national membership, but also to remind you of the deep-seated appreciation of your distinguished part in the proceedings, from the inception of the organic idea to the culmination, perfection and completion thereof.

While the intrinsic value of these badges of honor is not insignificant, yet that is not to be considered at all in conferring them upon you.

These badges are significant from the standpoint expressed in the words, "Honor to whom honor is due."

The obverse design illustrates the honorable calling which each of you follow in life—construction.

The miniature building in course of erection must be recognized at once as suggestive of the erection of this organization, with its foundation well laid, and the superstructure so far advanced as to make the design and purpose clearly discernible to the eye and understanding.

On the reverse stands out to view, in bold relief, a miniature of our national emblem, the proud, strong eagle, which represents the national character of our Association.

This insignia of office and mark of distinction is presented to each of you, gentlemen, as something to keep in mind the events of this time in your life, when in the future, near and remote, your thoughts revert to the past, and as something to which you can refer and exhibit with pride as having been received from applauding associates, whose respect and esteem were yours to an unlimited extent; and also as an heirloom to be transmitted to your succeeding generations, each carrying with it the pleasant history of these days when you were honored among men.

To you, Mr. George C. Prussing, to you, Mr. J. M. Blair, and to you, Mr. John S. Stevens, ex-presidents, I present each of you this badge of honor, in the name and on behalf of the National Association of Builders.

At the conclusion of the foregoing remarks by Mr. Campbell, which were received with applause, he presented the badges to the three gentlemen named, who, in response to calls from the house, spoke as follows:

GEORGE C. PRUSSING, Chicago, Ill.: In truth, I am sorry that funds of this Association have been diverted from their proper purpose and expended in this way, while our income is yet so small, so inadequate really to the large field which

of necessity is left to be, and should be covered by this Association; but since the deed is done and the money gone, I will admit that the measure of my sorrow is not by any means as monumental as it would have been had it not been understood that I should become the proud possessor of one of them.

Gentlemen, I accept this memento, presented in words so eloquent, as a token of your appreciation of the work attempted by this Association and the results attained, which sought expression and, during the hurry of the last hour of our last Convention, could find no better expression than to decorate those you have honored by calling upon them to preside over your deliberations. Gentlemen, I thank you most heartily.

J. M. BLAIR, Cincinnati, O.: Mr. Chairman and gentlemen, this is another case of the irrepressible Chicago and Ohio men. The diffidence of one is not exceeded by the modesty of the other. That is, either one would take anything that is offered to him. But, without being facetious, I want to say, as it was printed on the programme that badges were to be presented, it was presumed, no doubt, by you that those who were to be the recipients would prepare lengthy remarks. At the noon recess I

decided that I would dispense with the extended remarks prepared, and therefore all I have to say is, that I highly appreciate this honor that has been conferred upon me, and I shall never forget it, and so expressed myself in Chicago when I was elected the second President of the National Association of Builders. As I said at that time, it was the proudest moment of my life, and quoted from the remarks of my father, now deceased, that I would live to see the time when I considered the building business the most honorable in the country. I do not take this badge as presented to me personally, but I believe it comes from the members of this organization as a slight token of hospitalities received in the city of Cincinnati. I felt so at the time it was voted, and I shall return to Cincinnati, expressing to them that you have honored them through their representative.

Again, let me thank you, and I do hope I may continue to be of service to you in any minor capacity where the Association may desire my service.

JOHN S. STEVENS, Philadelphia, Pa.: Mr. President and gentlemen of the Convention, I know you do not want to hear me talk ; I have talked enough ; but this I do want to say : that

among the duties of the President of this Association is that of examining all the bills, and countersigning them as "approved" after the Secretary sends them to him marked "correct," before being sent to our Treasurer for payment. I have signed every bill very cheerfully with the exception of one, and that was the bill for these badges. The Secretary sent it to me marked "correct." I wrote him a letter. You have not got that letter in your satchel, Sayward, have you? I am sure you have, because Mr. Prussing must have got hold of it and copied it. I wrote Brother Sayward just to this effect, that I felt very reluctant about approving that bill, because I felt that the money could be so much more wisely expended in paying expenses of the proposed missionary trip that I wanted him to take, and which he was unable to take for the lack of funds. The deed was done; the resolution had been passed; the badges had been procured and the bill was there; we approved it, and, fortunately for us. I will tell you what happened: when our Treasurer came over here to Philadelphia, and we got together, talking about matters and things, how the treasury stood, etc., we found there was one assessment of \$110.00, and we thought possibly that might be paid, and if it was paid then w

would have \$3.33 left in the treasury, but if it was not paid we would just be about \$106.67 out. Fortunately that assessment was paid, and we closed our year with a balance of \$3.33 in our treasury.

We are all Quakers in Philadelphia, and we are not used to wearing ornaments of this kind. While I am very grateful for this beautiful badge, and no doubt it will be admired by myself and family and my colleagues at the Exchange, the possibilities are that in a little while it will have to be put in its case and locked up in my fire-proof, along with some little matters I have; but I want to tell you this: that while this may be locked up in my fire-proof, there is something else that will be locked up in my heart, and that is the affection that I have received, and the evidence of your esteem that this represents will be locked up there, and it will always be handy to be got at.

J. M. BLAIR, Cincinnati, O.: Mr. President, the members of the Cincinnati delegation desire in some manner to show their appreciation for the hospitality extended to them, and they have prepared a resolution of thanks to the Master Builders' Exchange of Philadelphia, which I desire the Secretary to read.

The following resolution was then read by Mr. Blair of Cincinnati:

Resolved, That the delegates to the Third Annual Convention of the National Association of Builders assembled in the city of Philadelphia hereby confess their inability to express a proper appreciation of the hospitality shown them by the Master Builders' Exchange of this city.

The "brotherly love" for which this metropolis has always been noted has been manifested on this occasion in such exuberant, overwhelming fashion that we feel as if the "high tide" of the art of entertaining has here been reached, and that it would be useless for other cities to imitate much less to equal it.

To the officers and members, therefore, of the Master Builders' Exchange of Philadelphia we extend our simple thanks; we recognize under all the outward manifestations of hospitality *that which we value much more highly* namely, "friendship,"—*friendship*, that quality which illumines the pathway of life, smooths away the asperities of business, and makes the conduct of all our affairs more even, just, and true.

Builders of Philadelphia, we are your friends and you are ours. To whatever city of this country you may go in which exists a filial body of this Association, be assured that you will find a welcome equal in fervor if not equal in the magnificence of manifestation which you have extended to us.

Resolution seconded and carried by a standing vote.

Three cheers were then given for the Master Builders' Exchange of Philadelphia.

On Thursday evening the Builders' Exchange of Philadelphia tendered a complimentary banquet and reception to the National Association of Builders' and other guests, at Horticultural Hall.

Six hundred and fifty covers were laid, and the banquet hall presented a scene seldom

equaled in brilliancy even in the city of Philadelphia, renowned as it is for the splendor of its entertainments. The beautifully decorated tables, glittering with candelabra and "fairy lamps," the masses of foliage, growing plants, and cut flowers which embowered the stage at the end of the hall to the rear of the principal table, the strains of sweet music, all combined to produce an effect upon the minds of those present not soon to be forgotten. At the close of an elaborate *menu*, which was served in the most complete and perfect manner by one of Philadelphia's most noted caterers, the post-prandial exercises began.

Ex-Mayor William B. Smith, the toast-master, called on David A. Woelpper, who delivered an address of welcome, as follows:

MR. PRESIDENT, DELEGATES AND VISITORS OF THE NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES:—As representative of the Master Builders' Exchange of Philadelphia, and as their presiding officer, I am delegated to welcome you to the festivities of this evening. Also to you, gentlemen, our invited guests, not members of the National Association, I extend the same courtesies.

I well remember, as do many others who are present, the cordial welcome extended to

the National Association on the occasion of their first meeting in the city of Chicago, in 1887, and again at Cincinnati last year, when the members of the Exchanges of those cities, as well as the citizens generally, exerted themselves to the utmost to minister to our comfort and entertainment; and the delegates from Philadelphia almost shrunk from the responsibility they were incurring in inviting you to meet with us this year. They felt then, as they now more fully realize, that the task they assumed, in the face of the hospitalities experienced in those cities, would be very great.

You will remember when you were invited to meet in Philadelphia, our Quaker City, the City of Brotherly Love, we simply promised you a hearty and cordial greeting, with the assurance that we would endeavor to reciprocate the many kindnesses and evidences of welcome you so kindly bestowed on us; and this evening I feel proud that I have the opportunity of tendering to you, on behalf of our local Exchange, this evidence of our pleasure in having you with us, and our appreciation of the honor you have done our beloved city in meeting within its borders, and assure you again of the heartiness of our welcome.

This entertainment is for you, gentlemen; it is your banquet. These floral and other decora-

tions are yours, and we tender them to you as an assurance that you are even more than welcome, if such were possible.

I ask your indulgence for a moment. I have a very pleasant duty imposed upon me this evening, and I know of no better time than the present to perform it.

At the annual meeting of our Exchange, our honored president announced his determination to decline a re-election, much to the regret of all. Whereupon, a committee was appointed to prepare a suitable testimonial of our appreciation of his valuable services since the organization of our Exchange.

The committee have performed their duties, and, Mr. John S. Stevens, it now becomes my pleasant duty, on behalf of the committee, to present you with this counterfeit presentment of yourself, and ask you to accept it as an evidence of the esteem in which you are held by your fellow-members of the Exchange.

These remarks called forth hearty and enthusiastic cheers, and after the applause had subsided Mr. Stevens spoke as follows:

MR. PRESIDENT AND GENTLEMEN:—It is always pleasant to know that in the fulfilment of one's duties as an officer he has in the main given satisfaction.

I have been much gratified by the many kind expressions of the gentlemen of the Exchange, and have felt amply repaid for all the labor and responsibility of the office from which I now retire after two years of service. Our relations have been of the most pleasant character, and the cheerful support and the ready aquiescence accorded me by the members are greatly appreciated. But now you place me under still greater obligations by this testimonial, so artistically prepared and thus publicly presented.

I assure you, gentlemen, I appreciate it more than I can express. Your committee deserve much praise for the manner in which they have performed their duties.

I know you will excuse me, or rather thank me, for not making any lengthy address, for your programme tells me you will hear from gentlemen better able to interest and instruct you than I am.

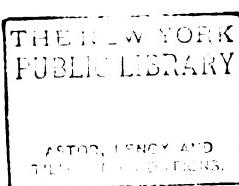
I thank you, Mr. President, for the very kind and flattering words you have used in presenting this testimonial, and feel assured that the duties of the office from which I retire will be faithfully administered by you as my successor.

At the conclusion of Mr. Stevens' remarks there was hearty applause.

Mr. Woelpper again took the floor, and presented to Mr. Stevens, on behalf of his "old



CANADIAN HUT AND HOUSE OF THE AZTECS.
HABITATIONS OF MEX. PARIS EXPOSITION, 1869.



Board of Directors," a beautiful watch and chain, in the following words :

I must trespass a moment longer upon your time, gentlemen.

Mr. John S. Stevens, the Board of Directors, who of necessity met you more frequently and were thrown more closely into contact with you as their presiding officer, learned not only to appreciate your qualities as an officer but learned to love you as a man.

Your wise counsels, your sterling integrity and comprehensive views encouraged them to attempt grand things, and accomplish much that has redounded to the honor of the Exchange, increased its influence for good, and made it what it is.

Learning it was your intention to spend some months on the other side of the Atlantic, where you would cease to be under their watchful eyes, they thought they would send with you a watch which they desire to chain upon you, that wherever you may be you will be constantly reminded of your loved friends and companions at home.

On behalf of your old Board of Directors, I have great pleasure in asking your acceptance of this beautiful watch and chain.

There was long-continued and hearty applause at the conclusion of the foregoing, and

Mr. Stevens, after having been called on by the guests, acknowledged the gift in the following words :

MR. PRESIDENT :—If it was your wish to embarrass me, you have been successful. It is not often that I am at a loss for words to express my feelings, but words fail me on this occasion. The kindness of the members is only excelled by this act on the part of the Directors. Gentlemen, I feel unworthy of such distinction and consideration at your hands. I have only done what each of you has done—duty. I can but feel extreme gratitude that you so publicly announce your appreciation. I can only say, in presence of the National Association and their distinguished visitors, what I have repeatedly said to the Exchange, that they are peculiarly fortunate in selecting such gentlemen as Directors. It has been my good fortune to be a member of many boards of directors, but never have I met so many gentlemen who unselfishly gave so generously of their time, talents and treasures for the good of an association as your own Board of Directors, and as long as such gentlemen are selected to administer your affairs, I feel assured success and prosperity await you.

Mr. President and gentlemen ~~of the National Association~~
Directors, I accept this h

spirit in which it is tendered, and as I day by day consult it to note the flight of time I will be reminded of your generosity and the many pleasant hours we have spent together in the interest of our Exchange.

At the conclusion of these remarks, after hearty and prolonged applause, three cheers were given for Mr. John S. Stevens.

Toast-master Smith called on the newly elected President, Mr. Edward E. Scribner, of St. Paul, to respond to the toast "Our Guests." He spoke as follows:

MR. PRESIDENT AND GENTLEMEN:—One of my age is expected to be prepared on a notice of three months or more to speak, *ex tempore*, intelligently on any subject under the canopy—or above it, for that matter. If a man be an animal—and it suits my purpose to-night to declare that he is—I respectfully submit that I have here a case fit for presentment to your Society for the Prevention of Cruelty to Animals. The idea of bringing an innocent young man 1500 miles from home, piling upon his head honors three deep, filling him to repletion with rich viands, exposing his unaccustomed brain to the aroma of rich wines, and then expect him on one hour's notice to respond adequately to the toast to which you expect him to respond to-night!

Since sitting here it has occurred to me that, though but recently elevated to the position which you have so kindly conferred upon me, it is well that I should commence early in the day to exercise my power. I have fortunately at hand one far more able to speak interestingly to you to-night, our Secretary, Mr. William H. Sayward, who has been notified to-day through the Convention that he is expected to act upon every committee, whether standing or special. I, being now constituted a committee of one, it comes within my power to order our Secretary to respond to this toast. (Applause.)

After repeated calls, Mr. Sayward took the platform and spoke as follows:

MR. PRESIDENT, MR. TOAST-MASTER AND GENTLEMEN OF THE MASTER BUILDERS' EXCHANGE OF PHILADELPHIA, AND OF THE NATIONAL ASSOCIATION OF BUILDERS:—You who look upon this scene in all its beauty and splendor can little imagine what it means to me.

I look out upon this brilliant gathering and realize that the little thought of two years ago has blossomed out into a magnificent flower, and that of seed, and plant, and flower, I have been the gardener. (Applause.)

I speak of it with no conceit, but with the purest pride of the human heart; for what can

be more delicious to any man than to feel that he has been the humble instrument of bringing hundreds of his fellow-beings into social intercourse and friendly relation, not to be broken so long as their lives may last? (Applause.)

Two years ago it seemed to me almost like a dream for it to be possible to gather from all parts in the Union men in the calling of builders to unite in an Association which should bring with its union strength and symmetry and beauty. To-night I see it all before me, and I am thankful that the thought came to me, thankful that these dear fellows who have worked with me have helped to bring it to this fruition. (Great applause.)

To you, gentlemen, who have been my co-adjudors so far in this work, I render my profound thanks, for however strong might have been my conviction that it was good to try to do this thing, I never could have done it had it not been for such men as those you have lately honored here, and for others who flocked to our standard.

I am proud to be here, proud to feel that I am one of these honored builders, that I am one of them at a time like this, when we are standing out clear up above places that we used to hold, into the purer, clearer, cleaner light,

doing our part in all the affairs of the world, in all the affairs of the communities in which we live.

Gentlemen, I thank you all for what you have done so far, and I thank you for the enthusiasm which promises so much for the future. (Applause.)

TOAST-MASTER SMITH: Gentlemen, the third toast is "The Quaker City," and it gives me a pleasure which can only be equaled by the pride and satisfaction with which you will receive the name of the gentleman who is to respond to that toast. I have the great pleasure of introducing to you a gentleman qualified by reputation, by ability, by official position, and all that typifies manhood, the Hon. George S. Graham, the District Attorney of Philadelphia.

This announcement was received with applause, after which Mr. Graham spoke as follows :

MR. CHAIRMAN, AND YOU, MR. TOAST-MASTER, AND YOU, GENTLEMEN OF THIS JOINT CONVENTION: I come before you at this late hour with great diffidence. I know that you have been enjoying the repast to the full, and I would not, at this hour of the night, intrude remarks of any length upon you. I am proud of this gathering in Philadelphia. A scene of unsur-

passed beauty, imposing in its magnificence, greeted all our eyes to-night when we entered this room, and I have enjoyed your banquet with you, and, as a Philadelphian, feel great pride in this gathering of builders and the associated trades in our city. I am to respond to-night to the toast, "The Quaker City." I suppose that word "Quaker" was introduced because I am a Quaker. That is to say my father and mother came from the north of that dear old island that is called "Erin," and therefore I am a Quaker. I have one right to speak to-night on such a toast as this, and it is the right that belongs to birth, for I was born in this grand city, and it gives me pleasure, as one of the citizens of Philadelphia, to say how welcome you are to Philadelphia and all its hospitalities. I would not attempt to draw any comparison between our city and the cities that are represented by so many distinguished men here to-night, or to draw any distinction whatever. I know that this is not the only city in the United States. I am proud of the fact that all across the broad expanse of our glorious country there is a multitude of cities, grand and magnificent, that rise to greet the growing empire of the West. From Boston to New Orleans, from Philadelphia to the Golden Gate, our great country is filled up with magnificent cities that you are building for us.

There are some things of which we, as Philadelphians, are especially proud. We are proud of the historical associations of our city. Read the pages of these beautiful souvenirs of this occasion, and you will there find interesting stories of our Carpenters' Hall, and of Independence Hall, the very cradle of liberty in our land. I am sure that none of our sister cities will grudge us the meed of praise that belongs to the fact that in those Revolutionary days Congresses assembled, Presidents were inaugurated, Supreme Courts held their judicial sittings, in this truly American city upon this continent, Philadelphia.

We are proud of the fact, and it has come to be a trite saying, for all know it, that our city is prominently the City of Homes—homes where men live and own their homes, where the spirit of riot and anarchy and destruction has not yet come, because our city is this City of Homes.

I think, if the figures are correctly reported, there were in the beginning of this decade 170,000 buildings in this city; 156,000 of those were dwellings, homes for the citizens of Philadelphia, and 110,000 of those were owned by the people who lived in them. Since then, a gentleman in this room to-night informs me,

there have been permits for new homes and buildings issued at the rate of 5500 per year, grandly increasing the total of those buildings.

We are proud of the fact in that connection that the old sameness of structure is beginning to change; that the artistic taste is beginning to develop among builders, and that you are beginning to beautify and adorn our city.

Look at the pictures of the magnificent buildings recently reared in our midst—buildings that will stand forever as monuments of skill and industry on the part of those who conceived and projected them.

In close proximity to this place there is a building yet unfinished that promises to be, as a county building, as a seat of municipal justice and administration, one of the grandest structures on this continent, and scarcely equaled upon the continent of Europe.

We are proud of these things. I need not point to you the great expanse of our city, in which we have a great many streets; and yet my friend, Mayor Smith, knows some of them are not very well paved; but we have a great deal of light, and we have a great deal of gas in our city (and you are getting some of it now). These streets of ours betoken one thing

that is a subject of pride with us, and that our city is expansive and expanding, that its miles of streets are stretching out every direction. I am told if you put them in a single line you might march from here to St. Louis or down to New Orleans upon continuous line of streets.

Then, you know, our city is the city of centennial celebrations. A friend of mine came recently from the West told me about a mayor of a Western town. Some of you who came from that benighted country away out West may know that they have exhibitions sometimes; that they have fairs and entertainments and all that is the purpose of booming town lots. So my friend was introduced to the mayor of a Western town of very recent and rapid growth and he said, "Ah, yes; I know your town well, know Philadelphia. Why, I was there when you had your boom." My friend looked at him in astonishment, and said, "What do you mean?" "Oh, the time you had the boom in 1876"—meaning our great Centennial celebration.

We can have centennials of the independence of our colonies; we can have centennials of the establishment of our city; we can have cen-

tutional celebrations; and we invite all the world to come and enjoy the hospitality of our most hospitable city.

Time will not permit, and, in the presence of these distinguished orators, Mr. Smith and Mr. Warwick, I do not want to keep you listening and partaking of that which is only "hard-tack," when the real refreshments and enjoyable things are yet to come. Time will not suffice in which to tell you of the many things that distinguish our city.

We are proud of her name. There is to me something musical, something that is full of sweetness, in that grand old word, "Philadelphia—Brotherly Love." So, to-night, could I close these few scattering thoughts with a more fitting allusion than to refer to the fact that Philadelphia is prominent for her hospitality, the latch-string always hangs out, and guests who come to our hearts and our homes are made to feel that they are in the midst of the "City of Brotherly Love," where there is law and order, and peace and prosperity for all?

You may not want to know particularly that it is a city of law and order, and yet I can say, for the comfort of the noisy members of this Convention, that the Superintendent of Police told me to-night that you were under his

case; and I promise you also, as the ~~prosecuting~~ attorney for this county, that I will accept the bond of Mr. Smith as bail for all of you.

After the applause at the conclusion of these remarks had subsided, three cheers were given for George S. Graham.

TOAST-MASTER SMITH: The next regular toast is "Architecture, Past and Present," and it gives me great satisfaction to call upon a young man who by his knowledge of the subject, by his association with builders, by his capacity to respond to anything that is interesting to his fellow-citizens and pleasant to his friends, has all the qualifications to make a speech upon any subject, at any time, without notice and without notes. I desire to introduce to you none other than my old friend and your friend, Charles F. Warwick, our city solicitor.

Three cheers were given for Mr. Warwick.

CHARLES F. WARWICK: Mr. Chairman, and Gentlemen and Members of this Joint Convention, why I was assigned to respond to the toast "Architecture of the Present and the Past" is beyond my comprehension. I am not an architect, neither by training nor profession, although I may say that it is an art to which I have given much study, and one in which I have found much delight.

Architecture does not rise to the dignity of an art, or, as someone has well said, is not a veritable art, until society has reached a certain condition in civilization. Religion, power, wealth, luxury and refined leisure—the results of civilization—all combine to create a desire and to afford an opportunity for the encouragement and advancement of art, but in the whole range of fine arts there is not one that has accomplished so much for man as architecture. Painting pleases the eye and delights the senses of taste and refinement. The gorgeous coloring of a Titian, the sweetness in expression of a Raphael, move us to wonder, to love and to admiration. Sculpture, under the chisel of the artist, brings out from the rough stone, as it were, the beauty of life in its loveliest and most graceful forms, and we stand in rapt admiration before the works of a Phidias, an Angelo and a Canova.

The Apollo Belvedere, the Venus di Milo, the Laocoön, will please and delight the ages yet to come as the finest works of genius in art; but they seem to be the adornments and accessories to the most practical and at the same time the most beautiful of all the arts.

Even the untrained and uncultured man cannot stand in the presence of a magnificent

cathedral or temple without being impressed by its symmetry, its beauty and its simple grandeur. Though he be unfamiliar with the rules that govern taste, though he be unable to point out the lines of beauty that mark the structure, though he be unable to distinguish one style from another, though he can give no reason for the delight and satisfaction he feels, yet he stands impressed and moved to adoration by the elegance and grandeur of its proportions.

Surely it must be admitted, as I have already said, that among all the arts there is not one that has accomplished so much for man as architecture. æsthetically and practically considered; and if I am not trespassing too long upon your time, it may not be out of place to trace briefly the epochs that mark its history ; for the epochs in architecture are just as distinct and as clearly defined as the eras in letters and in science.

The primary use of architecture was to build a shelter for man against the inclemency of the weather, to protect him against the burning suns of summer and the biting frosts of winter. In the early days, long before societies were well formed, the vocations of man were to hunt, to herd his flocks and to till the ground. These, in all ages, seem to be the successive steps towards civilization. The hunter, who ~~followed~~

the wild beast to his lair, lived out in nature, and made his habitation (like his prey) the woods and caves. The shepherd provided for himself a temporary structure, a hut, and abided in one place only—so long as the pasture remained for his cattle. But when the husbandman, the tiller of the soil, began to make for himself a local habitation, when he found a spot that he could call his home, and when he felt the cozy delight and the joys of the family circle and the patriotism that cluster round and about the hearthstone, he built for himself a house that was fixed in its locality and permanent in its condition. From these humble beginnings, architecture finds its birth.

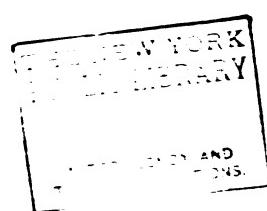
As society progressed, as civilization advanced, as towns and cities sprang up, as wealth and luxury increased, the arts began to flourish, and magnificent temples were reared, and dedicated to the State, to the gods and to religion.

We must go far into the East, into India, to find the people who first reached a state of civilization. Among the Hindoos the buildings were of two kinds: real structural buildings, and cave temples. The distinguishing characteristic of their architecture, however, was size and strength and heavy or elaborate ornamentation. Surrounded by natural phenomena,

wl spired terror and dread, they felt the **power** the uncontrollable and, to them, the **unknown** forces of nature. By very reason of this **fear** their imagination was inflamed, and, in art, **their** fancy became uncontrollable. They seemed **like** pygmies in contrast with the works of **nature** that surrounded them, and their uncultured **and** unrestraint **art.** When th **their** own in **ored** by stupen **ornamentation, to** **ance** that would, in **own** superstitious **to extravagance in** **ples, impressed with** men, they endeav- **by large and heavy** strength in appear- **re, approach to their** vagrant ideas of na- **ture.** For example, ~~the~~ the cave temple at Elora; heavy in appearance; there is no bridle given to fancy, in so far as the columns or sup- ports are concerned; but the interior, dim and crowded with large figures hewn out of the rock, must have moved to awe all the superstitious who worshiped in this temple. Their efforts seemed to belittle man, and, in the presence of that art dedicated to religious uses, they were made more dependent upon their god or gods. They had no distinctive characteristic style in architecture, as we will find in later ages. At times, the columns and supports were plain, and, again, elaborated to an extreme—but everything



FRENCH HOUSE OF THE FIFTEENTH CENTURY.
HABITATIONS OF MEN. PARIS EXPOSITION, 1889.



betokened strength. They had not found in art the lines and marks of beauty that subsequently graced the styles of later ages.

Leaving India, we turn our steps towards Egypt. Mysterious and vague seem to us the purposes of their architecture; but, standing in the shadow of the pyramids, we behold the greatest wonder of the Old World and the mightiest effort of man in the builder's work. Geometrically and mathematically correct in their proportions, they seem to have been built to last forever, for the ravages of time and the destructive progress of man seem to be set almost at defiance. The ages and the centuries that have come and gone since they were builded seem hardly to have made an impression upon their sides. The beating of the winds and the grinding sands of the desert hardly have left a mark upon their everlasting sides. For ages and ages yet to come they will stand as the wonder of the past. Still, as in India, we see the ruling feature of their art in impressive size. The rock temple at Ipsamboul with its colossal statues, the palace at Luxor with its massive pylons and its gigantic figures, dwarf man as he stands in their presence. The beautiful temple on the island of Philæ and the ruins of Thebes show an advance in the art. In

fact, now may be traced some of the lines that will soon mark with beauty the public buildings at Athens.

In a sketch so brief as this must necessarily be, we can only pass Babylonian and Assyrian architecture on our way to Greece, and give but a hurried glance at the grand and impressive ruins of Persepolis, that show the marked development of a cultivated taste.

At length we have reached Athens.

"... Behold,
Where on the Aegean shore a city stands,
Built nobly, pure the air and light the soil,
Athens, the eye of Greece, mother of art."

We stand at the foot of the Acropolis, crowned with the temples that will be forever the delight and study of the world. Sad but beautiful in their ruins, they speak of an art and culture gone, but whose influence will last so long as man desires to be taught and wishes to be pleased. We call to mind the Parthenon in its glory, every line that of beauty, every mark that of refinement, perfect in all its features, simple and pure in its grandeur, its outlines and details fill the mind with satisfaction and delight. Column, capital, architrave and cornice are drawn in the beauty of perfection, while the friezes, adorned with figures from the

chisel of Phidias, seem to glow with life under the inspiring touch of his genius. Its Doric simplicity makes it stand out as the very ecstasy of art. So with the Temple of Theseus and the other buildings that were all appropriate companion pieces to this model of the world in the age of Pericles.

There were three distinctive styles in Grecian architecture, known as the "column orders," because it is in the columns that the styles are more particularly or specially marked. They are the Doric, the Ionic and the Corinthian. The Doric was characterized by strength and simplicity. In this connection, let me say that there is a building in this city but a short distance from here that is not upon your programme, and to which you all should have gone as builders. I refer to the Rush Library, on Broad street, near Washington avenue, which is pronounced by those who are judges as the finest piece of Doric architecture in this country.

Following the Doric was the Ionic—a little more graceful and delicate in its outlines, or, as architects of the school of Ruskin would say, characterized by a little more spirituality.

The Corinthian was lighter than the Ionic, and its decorated capital made it subject to more adornments. The Parthenon, the Temple of

'
 s at Athens and the Temple of Neptune
at Latum are good examples of the Doric style.
The Irechtheum at Athens, the Temple of
Minerva Polias at Priene are Ionic, while the
Teple of Apollo Miletus is a good specimen of
Corinthian.

Coming down to our day, I may refer you to
Girard College, which you have all seen in your
visits through this city, as one of the finest
pieces of Corinthian architecture of modern
times.

From Greece we go to Rome. We will note two
orders, known as Tuscan and Composite, which
really follow the lines of the three Greek orders
 I have already referred to; the Tuscan closely
 approaching the Doric, and the Composite, as its
 name implies, being in a measure a combination
 of the three Grecian orders.

Rome took her lessons in art from Greece, and it would be but a repetition of Attic art to pass through the days of the empire and study the styles of architecture that adorn the Eternal City.

In the fifth century the empire of Rome in the west fell. Her territory had been invaded, and was then occupied by the barbarians from the north, and before the permanent settlement of new communities was reached, Europe passed

through ages that were dark in ignorance and superstition. But at length the dawn began to break, and art, under the influence of religion, began slowly to revive. At first, a style known as the Romanesque prevailed in church architecture ; and this was followed by the Gothic, or the Pointed Christian, as it is sometimes called, in contradistinction to the round Gothic or Romanesque just referred to. The term “Gothic” came from the Goths or Visigoths, and was applied in derision and contempt to this new style of architecture by those who were familiar with the classic or ancient orders. There was nothing in common between the Gothic and classic styles. The contrast was most marked.

In Grecian architecture all pressure was vertical ; all the parts were solidly supported. There was no feature of weakness in the column or upright. It gave no doubt in the observer’s mind as to its sufficiency—no trick nor secret in the construction of an arch, no flying buttress, no lancet or sharp-pointed window or gable or grand doorway, that had its pointed top nicely adjusted and delicately balanced. There were no lines of instability in the construction of a Greek temple. In the Gothic, however—that is, the pointed style, especially in the later periods, when it left the round arch that, in a

measure, characterized the Romanesque style—the building is made up of a counterpoise of pressures or thrusts, force against force, counteracting each other, and the whole structure at times elegantly balanced. To such an extent was this counterbalancing carried in the latter days of the order that many of the finest works of the middle-age architects have collapsed and left but a heap of ruin as a monument to their folly. Their purpose was to reach the effect produced by great lightness and slender and delicate proportions—grace rather than strength.

The tower and spire of the cathedral of St. Pierre, at Caen, the cathedrals at Toledo and Cologne, the Town Hall at Middleburg and the Doge's palace upon the Grand Canal at Venice, are fine examples of the Gothic style of architecture. This style rose in the twelfth century, developed in the thirteenth, was perfected in the fourteenth and declined in the fifteenth.

Causes that we cannot even refer to at this time were producing in Europe a great revival in art and in letters. The Greek and Latin classics that had been shut up within the libraries of Alexander and Constantinople were now being studied, in the original and through translation, with enthusiasm and ardor, and the art

and taste of the ancients was the passion of the day. This period, known as the Renaissance, produced a new style in architecture, modeled upon the rules and lines of the classic orders.

During this period were erected such buildings as St. Peter's in Rome and St. Paul's in London, and many others, with which, no doubt, you are very familiar. But, after all, with some defects in these latter styles, what can be more beautiful in its effect, what can move the soul to deeper devotion and adoration, than one of those old cathedrals, rich in the associations and memories of the past, whether it be in the style of Romanesque, Gothic or Renaissance ? Its

". . . high, embowered roof,
With antique pillars masey proof,
And storied windows, richly dight,
Casting a dim, religious light."

And so we have come down, step by step, but in our hurry we necessarily have had to pass many styles to which we even could not refer. In this practical age, what lessons have we learned that will be of use to us and ours ?

To-night, in our imagination, we have stood in the shadow of those beautiful and perfect pieces of architecture in Athens. We have wandered amid the mysterious ruins of Babylon, and have taken but a glance at the romantic

ruins of Persepolis, and the gorgeous
of the ruins at Rome. Why do we stu-
styles and beauties of the past? Only
may apply them to the beautiful and
buildings of the present.

The Old World, perhaps, surpasses us
beauty and magnificence of its temples
public buildings; but they had little know-
of the pleasures and comforts of home
we enjoy. Let us to-day, in our imagination,
stroll through the streets of Athens, in
of her power and glory. On our way to
Acropolis we stop and listen to the wise
falls from the lips of Socrates as he
his disciples and the young men
gathered about and around him for instruction.
Moving on, we listen to a Rhapsodist
cites a story from Homer, told only a
bard can tell it, and recited only as a
dist can recite it. We go to the public
and mingle with the people, with the
sund who control the politics of Athens.
go on farther, and enter the Parthenon,
mingle with the people in worship. The
over and the sun is sinking behind the
the Acropolis is bathed in the golden
beautiful sunset. Night comes on, and
rests in slumber, and after we have pl-

part as a citizen in Athens, we crawl to a place we call a home. In that great city of Athens, with all its power and beauty, we go to a home that cannot compare with a house in this city that rents for \$15 or \$20 a month. The poor man to-day enjoys more conveniences in his humble home than the rulers and the princes of the past could command.

What matters it to a man if a lofty temple be reared and dedicated to a god, if he lived in a hovel? What matters it to me if my voice be strong in the councils of my State, if I hie me to a home without comforts and conveniences? Our civilization is one hundred per cent. greater, better and loftier than the civilization of those old monarchies and republics I have referred to. These comforts, these advantages, these conveniences, make men better as citizens and more loyal in their patriotism; and there is no city on the face of the earth to-day where homes are brighter, more comfortable, and happier than in the city within whose borders we stand to-night.

There is no distinctive style of art in this New World. We have not had the luxury, we have not had the inordinate wealth to build these great temples that have decorated the ages and adorned the times of the past; and while

ly the past for its art, it will be proper
for builders to meet often upon such an
occasional as this to exchange views, and to let
the West know what the East is doing, and what
the North and South are doing, so that these
master mechanics and master builders may be
brought into close consultation, and be enabled
to consider the questions that are for the benefit
of all of us, and in that way elevate us and
make our homes better and our cities more
secure.

After hearty applause was indulged in, three
cheers were given by the guests for Mr. Warwick.

TOAST-MASTER SMITH: The next regular toast
is one which this Association and its friends
should be able to partake of with the most sin-
cere and heartfelt pleasure. It is to an instru-
ment that has brought you such marked atten-
tion, that has so well and so faithfully chronicled
your actions and has so well advanced in its
own incomparable way the work in which you are
engaged, that I know the toast of the "Press"
will meet a hearty response; and in calling upon
the gentleman whom I shall introduce to you to
respond to that toast, I can say that in his char-
acter as a newspaper man, in his ability as a
writer, in his logic, his rhetoric, and his argu-
ments, and in his desire to advance the interests

of his city and to advance the cause of humanity, Charles Emory Smith, whom I now introduce to you, has no peer. [Applause.]

CHARLES EMORY SMITH: Mr. Chairman and Gentlemen:—At this late hour I shall detain you but a few moments. When Abraham Lincoln told a story of a friend of his, who was custodian of the State Capitol at Springfield, Ill., he related that on one occasion this friend was applied to for the use of the hall of the House of Representatives for the delivery of a course of lectures. “May I ask the subject?” said Mr. Lincoln’s friend. “Certainly; the subject is ‘The Second Coming of the Lord.’” “No use,” said Mr. Lincoln’s friend; “take my advice, and don’t waste your time, for if the Lord has ever been in Springfield you will never get him to come here a second time.”

I am sure that this does not illustrate your disposition with reference to a second coming to Philadelphia. As a Philadelphian I am proud to join in this welcome which has been extended to you by my fellow-citizens, and to trust that the time is not far distant when you will give them the opportunity of welcoming you again with as cordial hand and as warm and fervid heart as they have extended to you during this Convention.

are the representatives of a great, solid and substantial trade, and you have made your advance in a manner somewhat different from that of the young man who was sent by his father to New Orleans upon a cotton speculation, and who made a rather serious mess of it. Not hearing from his son for some time, the anxious father telegraphed to him to know how he was getting on. The reply, "I am about seven dollars and fifty cents ahead on poker." The father, who was an eminent practical business man, telegraphed back immediately, "Drop cotton and stick to poker."

You have made your success not by this sort of speculation, but by your chosen and legitimate enterprise you are as practical as that Yankee from Boston, the city of your eloquent Secretary and of some of your worthy representatives, of whom Mrs. Prassy tells in her charming story of a voyage around the island of Santiago. The Yankee appeared at Santiago, and he was taken by a friend to see a bridge in which they felt great pride. The bridge spanned a ravine, through which, during certain seasons, there poured a turbulent torrent, but at the time when the Yankee visited it, the bed was perfectly dry, and the citizen of Santi-

ago, proud of this bridge, asked his friend what he thought of it. "Well," he said, "if I were in your place I would either buy a river or sell the bridge."

You are practical enough to believe that everything should have its use; but you who have kept pace with the improvement and taste of a cultivated people who are going forward are practical enough to believe, not only in the beauty of utility but in the utility of beauty. You are the representatives of the oldest trade in history, and yet your ancient predecessors enjoyed some advantages which you do not possess. When Solomon was building the Temple there was no reporter from the Jerusalem *Public Ledger* about to ask him whether every stone came up to the contract, and whether the slacked lime was just right.

When my friend Mr. Warwick was portraying in his eloquent tongue the glories and the beauties of the Parthenon at Athens, I could not help thinking that when Phidias was bossing the job of its construction there was no importunate interviewer from the Acropolis press wanting to know, "you know," whether the Doric column of which he spoke would stand the pressure, and especially whether Mr. Pericles was interested in the quarry of Pentelicus. If

Napoleon were making his expedition in Egypt to-day, instead of having made it three-fourths of a century ago, he would stand under the shadow of those mighty monuments, and, instead of seeking to inspire his army with the words, "Soldiers of France, from yonder pyramids forty centuries look down upon you," he would rather have turned his spy-glass toward the apex of the pyramids, and have animated them to deeds of valor with the words, "Soldiers of France, from the most eligible point on the top of yon pyramids forty war correspondents are looking down upon you, and to-morrow all Paris will witness your deeds of valor through the lifelike artistic wood-cuts in the morning newspapers."

Seriously, I was gratified to observe in the address at your Convention of your retiring President for whom you have to-night shown so much affection, and of whom we, in Philadelphia, are so proud—in pointing out some of the important objects of your associations he recognized that among the chief pillars in their achievement was the "press" of the country, and I trust that this alliance between your path and mine thus indicated will be fully realized. I could not myself have paid as high a tribute to the "press" as he offered when, portraying

its objects, he pointed to the support of the "press" as one of the chief reliances of your confidence. It is this supreme fact, that the "press" is thus directly and closely associated not merely with our political lives but with all the many-sided activities and interests of our complex business and social fabric, which marks its commanding place in our modern civilization.

You are the representatives of the greatest of all industries. The high demands of your vocation have summoned to your ranks the men of the largest capacity and energy and enterprise. We see the evidences not only of your handiwork, but we see the stately monuments of your skill and genius on every side. You have been quick to apply the results of scientific investigation to all the modern requirements of living and construction and convenience, and you have beautified our homes and you have transformed our business streets from the mere thoroughfares of unromantic trade into the picturesque avenues of majestic, towering magnificence, with every grace of outline and with every beauty of utility.

I trust that the "press" and the Builders' Association will stand together in this work which you are doing for the advancement of the community, for you lead the advance, and when-

ever there is any lagging you lead the work forward. This is the great work of the "press," not merely to gather news, but to reach out to a broader realm, and to be not merely a pillar of right in the State, but to be the minister of everything that is sightly and graceful in the home and in society.

One single word further. More than fifty years ago Thomas Carlyle said, "For if printing shall come to be as talk, then is democracy no longer a bugbear, but a thing as good as come." The prayer of that crusty old cynic has been realized: printing has become as talk; the "press" is the talk of the people, sometimes spoken with as many voices as there are varied opinions among many men or many minds, and sometimes thundering its voice in one mighty, concentrated, irresistible volume, which sweeps everything before it.

Carlyle was wrong in his prayer, but right in his prophecy. Printing is the greatest leveler the world has ever seen. The "press" is the mightiest engine of democracy. Wherever it has enjoyed its liberty it has dethroned despotism and enthroned the people. Wherever it has possessed the freedom to work out its natural destiny it has wrested power from the classes and placed it in the hands of the



HOTEL OF THE SIXTEENTH CENTURY.

HABITATIONS OF MEN, PARIS EXPOSITION 1889.



When Thomas Jefferson said he would rather have newspapers without a government than a government without newspapers he not only paid the highest tribute to the "press," but he recognized that an enlightened public opinion, and the broadest diffusion of opinion, and the vigilance of the daily sentinel on the watch-tower, and the inform and creative power of the daily discussion were greater forces in the social and civil life than even the commands and the resolutions of law. [Hearty applause.]

TOAST-MASTER SMITH : I regret to say that the gentleman who was to respond to the last toast has been compelled by the lateness of the hour to leave the hall. It was the intention of the committee to have Colonel McClure respond to the toast, "The Ladies, Married and Single." I will not attempt to respond to the toast, but I will simply say that many of you will have the pleasant satisfaction of having this toast responded to at the other end of the line.

The guests then gave three times three cheers for the master builders of Philadelphia, and the happy affair was at an end.

On March 26, 1889, the following resolutions, handsomely engrossed, were received from the Builders' Exchange of Baltimore, Md.

THE BUILDERS' EXCHANGE,
No. 19 WEST SARATOGA STREET,

Baltimore, Md.

At a special meeting of the Builders' Exchange of Baltimore City, held February 19, 1889, the following resolution was adopted and ordered to be forwarded to the Master Builders' Exchange of Philadelphia.

Resolved, That the thanks of this Exchange be tendered the Master Builders' 1 in Philadelphia for the magnificent reception tendered us of kindness, which will never be forgotten. Especially do we wish to express our thanks to the members of the different committees for their untiring attention and courtesy, whereby we were enabled to see the magnificent buildings and places of note in the city. We extend our Brotherly Love, while attending the Third Annual Convention of the National Association of Builders, February 12, 13 and 14, 1889.

Signed, E. L. BARTLETT, *President.*
 E. D. MILLER, *Secretary.*

The Mechanics and Traders' Exchange of New York expressed their appreciation of the reception accorded the New York delegation, as follows:

MECHANICS AND TRADERS' EXCHANGE
OF THE CITY OF NEW YORK.
No. 14 VESSEY STREET, NEW YORK.

March 15, 1889.

To the Master Builders' Exchange of Philadelphia.

GENTLEMEN:—At a regular monthly meeting of this Exchange, held this day, the report of the delegates to the Annual Convention of the National Association of Builders, recently held in your city, was presented, and the remarks of the delegates and visitors were very warmly eulogistic of the manner in which they had been entertained by you. A committee was appointed to communicate to you the cordial and hearty thanks of our Exchange.

In attempting to carry out these instructions we are conscious of our inability to adequately express our feelings. Your boundless liberality; your cordial and hearty reception and entertainment of us; your enthusiastic interest in the welfare and success of the Convention and the National Association of Builders; the able and impartial manner in which your honored and honorable associate, John S. Stevens, Esq., presided over the deliberations of that body, conspired to produce in us a warm personal regard for your individuality and a strong desire to emulate your spirit of enterprise as an Exchange.

We congratulate you upon the success of your efforts to make the Convention of 1889 a notable event in the history of the National Association of Builders; for the promising outlook of your Exchange; for the many beautiful buildings in your city; the enduring testimonials of your skill. May the spirit which animates you, of which we were the witnesses, serve to arouse in us and in all our sister Exchanges a corresponding ambition to excel in all branches of our individual and corporate work. With warm feelings of personal regard we are,

Very sincerely yours,

Signed, MARC EIDLITZ,
 WILLIAM C. SMITH, } Committee.
 W. H. REDFIELD,

SAMUEL T. ARCHER, *President.*

EDMOND A. VAUGHN, *Secretary.*

The Providence, R. I., Exchange expressed its gratitude in the graceful series of resolutions given herewith :

MECHANICS' EXCHANGE,
Nos. 5 AND 9 CUSTOM HOUSE STREET.

Providence, R. I., March 4, 1889.

To the Master Builders' Exchange of Philadelphia, Pa.

GREETING :—At a special meeting held this day it was

Resolved, That the hearty thanks and acknowledgments of this Exchange are due and are hereby tendered to the Master Builders'

Exchange of Philadelphia, Pa., for the gentlemanly and generous manner in which the delegates from this body to the National Association of Builders' Convention were received and entertained, and also to the individual members for the many kindly courtesies extended by them.

Signed, JAMES S. HUDSON, *President.*

WILLIAM F. CODY, *Secretary.*

V.

The Building Committee was authorized on January 31, 1889, to proceed with the remodeling of the Seventh street property. Plans prepared by Wilson Bros. & Co. were formally accepted, but it was not until April 11 following that it was decided to erect the present magnificent structure, which includes only a very small portion of the original building owned by the German Society.

Nothing ever occurred in the history of the Exchange that proved more pleasing than the visit of Mr. E. D. Miller, Mr. E. L. Bartlett, Mr. William Ferguson, Mr. George Mann, Mr. Theodore Osker and Mr. N. H. Creager on April 23. They came as representatives of the Builders' Exchange of Baltimore. Their mission was one of good fellowship. Mr. Miller, in addressing the builders of Philadelphia, said :

MR. PRESIDENT AND GENTLEMEN:—One of the greatest, certainly the most blessed, of the amenities of life is hospitality—the characteristic of great, good men. It has the subtle quality of enriching those who exercise it, shedding about them a fragrance as of balmy spring. It is our privilege to be here to-day and express to you our appreciation of the royal welcome

you gave us. With a lavish hospitality you threw wide open to us the doors of your city. You drew us by close-clasped hands through walks of Elysian delight, and spread before us a feast of viands fit for no less than the Olympian gods themselves. Yours was the opportunity then, and ours the privilege. Yet we deem it a far greater privilege that ours is now the opportunity to attest our appreciation. With hearts aglow we hasten to join hands with you. Let us feel again the warm life-blood pulsate beneath the pressure, and swear eternal allegiance. While we live, let us come into closer, more frequent contact. While we work, let us efface all mark of boundary. While we build, let us build upon this rock of brotherly fidelity.

Never could we forget those days, though it were possible for the centuries to bleach our hair ; yet, lest we may pass away, and posterity perchance shall forget those days, we would have it memorialized and emblazoned upon imperishable silver and gold.

Therefore, Mr. President, permit us, in the name of the Builders' Exchange of Baltimore, to present to you this Punch Bowl, the emblem of hospitality—Maryland in its symbols, Baltimorean in its manufacture—as a mark of our appreciation of your courtesy and hospitality.

The address was cheered to an echo. After silence was obtained, President David A. Woelpper accepted the beautiful gift on behalf of the Philadelphia Exchange, and called upon John S. Stevens to respond to the eloquent address of the gentleman from Baltimore.

After an informal but enthusiastic reception, Secretary William Harkness, Jr., announced that Governor James A. Beaver had honored the Master Builders' Exchange of Philadelphia by appointing William B. Irvine a Trustee of the Pennsylvania Museum and School of Industrial Art.

At the meeting held on April 30, 1889, the rules and conditions under which estimates should be submitted by contractors in the building trade were agreed upon.

The Historical Committee, having in charge the compilation of this work, through Chairman Harris, on May 28, 1889, secured the appointment of a Historian, whose duty it shall be to continue this record of events in the coming years.

When all the world, horror-struck, was discussing the frightful calamity at Johnstown, the Master Builders' Exchange, on June 4, held a special meeting to arrange for liberal and speedy methods of aiding the suffering thou-

sands in the valley of the Conemaugh. The members of the Exchange knew absolutely nothing of the damage done by the awful flood, save the fact that hundreds of Johnstown's best people were dead and thousands of men, women and children were suffering from horrible wounds, exposure and hunger. Details were unnecessary. Immediate action was imperative. President Woelpper stated briefly the object of the special meeting and called for suggestions.

Mr. Samuel J. Creswell arose and bluntly remarked that the people of Johnstown wanted suggestions from no one but had to have money from everybody, and that the best thing the Builders of Philadelphia could do was to furnish money. He offered the following resolution which was unanimously adopted :

Resolved, That the members of the Master Builders' Exchange pledge themselves to subscribe at least five thousand dollars in aid of the sufferers at Johnstown and vicinity within the next ten days.

In his report, submitted on June 25, President Woelpper said that the members of the Exchange had contributed \$6237.90 to the fund, and that the committee had received only cordial co-operation from every member and liberal responses from all. At this time the Exchange had 276 members, with an average daily attendance of fifty.

Fully 1000 people attended the opening of the new Exchange building on October 28, 1889. David A. Woelpner, President of the Exchange, presided, and introduced Secretary William H. Sayward, of the National Association of Builders, who gave a brief outline of the work accomplished by the National Association and the local Exchange, of which he is an honorary member. He said, during the course of his remarks, that the Master Builders' Exchange of Philadelphia was a credit to the city of Philadelphia and an honor to the National Association. Hon. Richard Vaux, ex-mayor of Philadelphia, followed with a brief address, showing the great work accomplished by the builders of Philadelphia, and anticipated the results to be attained by the Master Builders' Exchange. He was followed by District-Attorney George S. Graham, Col. Alexander K. McClure and Director of Public Works Louis Wagner, all of whom paid high tribute to the local Exchange. A collation was served in the Exchange-room, which was beautifully decorated for the occasion.

The Exhibition Department opened on November 11, 1889. No formal exercises were indulged in. The tardiness of exhibitors in getting their displays in place precluded the possibility of

c ceremony in connection with the which had been well advertised. Rents commenced on that date, however, and the payment of the first quarter in advance proved a motive power that set exhibitors to work putting their displays in place, so that by the first of January the exhibit was very creditable and attracted many daily visitors.

Mr. Stacy Reeves, First Vice-President of the Exchange, was called upon at the meeting held on November 24, 1889, to deliver an address on "The Uses and Advantages of Our Exchange." Mr. Reeves said :

MR. PRESIDENT AND MEMBERS OF THE MASTER BUILDERS' EXCHANGE OF PHILADELPHIA :

—Gentlemen : On this, the occasion of our meeting for the first time in our new building, it seems to me we have much on which we may justly congratulate ourselves. But a little more than three years have passed since a few—perhaps less than a "baker's dozen" (I am sure there was not more than a score)—gentlemen met to consider the desirability and feasibility of forming a Master Builders' Exchange in and for the city of Philadelphia.

Those of you who were present (and I see several here who were at this first meeting) will recollect how experimental the whole matter

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STACY REEVES,
PRESIDENT, 1890.

STACY REEVES.

The third President of the Master Builders' Exchange of Philadelphia, Stacy Reeves, was born June 16, 1828, on his father's farm, near Mount Holly, Burlington county, New Jersey, where he spent his childhood. His father, Mr. Abram Reeves, died in 1836, and two years later Stacy Reeves was an orphan, his mother, Mary Reeves, *nee* Matlack, having passed away. Soon after the death of his mother Stacy Reeves was placed in the home of a distant maternal relative, where he remained until fifteen years of age, attending the primitive country schools of the neighborhood in the winter and assisting about the farm during the summer months. After spending one year at the Friends' school at Westtown, he was apprenticed to Mark Balderston, a prominent master carpenter, of Philadelphia, with whom he learned his trade. He continued in the employ of Mr. Balderston some two years after reaching his majority, and frequently worked for that gentleman after establishing himself in business in 1851. He served in the Pennsylvania State Militia, 1862-63, and joined the Carpenters' Company, the oldest association of the kind in America, in 1869, and of which he was elected secretary in 1889 for a term of three years. He is a charter member of the Master Builders' Exchange of Philadelphia, and one of the managers of the Franklin Institute. He is regarded as one of the most conservative and responsible men doing business in the city. Prior to the Centennial, in 1876, the business conducted by Stacy Reeves was modest, yet profitable, and in later years grew very rapidly. His son, Albert A., was taken into partnership in 1877, and a younger son, Henry Reeves, in 1885; and they now practically have charge of the large business of Stacy Reeves & Sons, under the general direction of the head of the firm. Stacy Reeves has built many of the largest structures in Philadelphia and the surrounding country, including the Wood building, at Fourth and Chestnut streets; Drexel building, at Fifth and Chestnut streets; Forrest building, on the east side of Fourth street, south of Chestnut; Hotel Lafayette, on the west side of Broad street, south of Chestnut; the Lehigh Valley buildings, at Mauch Chunk, Pa.; Lehigh University, at Bethlehem; and the Industrial School, built by the Misses Drexel, at Eddington, Bucks county. He has been a delegate from the Philadelphia Master Builders' Exchange to all Conventions of the National Association of Builders held since 1888, and during the years 1891 and 1892 has been one of the directors and delegates-at-large of that organization.



then seemed, and how few there were to take part in the undertaking, and after an interchange of views an adjournment to a future meeting was had, and as you, no doubt, recollect that at this adjourned meeting a less number was present than at the first. But, although less in numbers, there was not wanting that faith in the utility and practicability of the undertaking so essential to success in any effort; and whilst we have not yet grown in numbers or accomplished all we could have wished, I do submit, Mr. President, that he would have been thought a most sanguine man who then would have prophesied that we would in the comparatively short space of three years have been so comfortably and advantageously located in our own building as we are to-day. And I am sure the further assertion may be confidently ventured that, whilst very much remains yet to be done that should, and, I think, can be done for the advancement of the building interests, to-day the building mechanics of this city exert an influence and occupy an advanced position in the community, due to the existence of this Exchange, to which they have heretofore been strangers.

But, Mr. President and gentlemen, as I have already stated, much remains to be done; and

the labor of and the shortening of the time of its accomplishment depends largely, and may I not add, solely, upon the individual efforts of all our members? Given this individual effort —although by no means an exceptionally sanguine man, neither a prophet nor the son of one—I venture the prediction that before this Exchange is five years older its advantages will be so manifest, even to the most doubting, that membership in its ranks on the part of anyone interested in the building trades will be considered both an honor and a privilege. These may seem to some strong and over-sanguine words; but, gentlemen, when I point you to what has already been accomplished in three short years, and remind you that the starting of and the early stages of an undertaking like this is always the most difficult of accomplishment, I am sure you will agree with me that all that is wanted for its attainment is an earnest effort on the part of all.

Gentlemen, the time has passed when a Builders' Exchange in this city can be said to be an experiment. It is a fixed fact, and only needs that we be true and loyal to our undertaking to realize all our reasonable expectations.

I know, Mr. President, and it is in sorrow that I say I know it, that there are some mem-

bers who cannot see that the Exchange has yet been or is likely to be of much if any advantage to the building interests. But, gentlemen, I do not sorrow as one without hope when I reflect that, so far as my knowledge goes, those who entertain these views I am sure do so from want of knowledge of what has been and is being done and the influence exerted (due solely to the existence of this Exchange) for the advancement of the building interests. Neither do I sympathize unduly with the gentlemen entertaining these views, as before stated. I believe it arises from a want of knowledge of what has been and is being done.

For this lack of knowledge they have only themselves to censure, for did they attend more frequently the sessions of the Exchange I am sure they would be better informed, and I confidently believe would experience a change of views ; and I am more convinced of this as it is amongst those whose attendance is least frequent that this want of belief in the advantages to be derived from the Exchange is mostly entertained. Gentlemen, I beg you to believe that I do not refer to this in any spirit of unkindness, but with much regret and in the earnest hope that it will be accepted as it is meant, for the best interest of all. Certainly it

conceded that there are many matters of
to the building trades that should be
and, I think, can be improved through the
influences of an organized body like this, that
we as individuals, acting independent of each
other, would be powerless to effect, hence the
necessity for some such body as this. Therefore,
Mr. President a gentlemen, having asso-
ciated ourselves t or the accomplishment
of a perfectly l object (the improve-
ment and elevation building interests), to
say nothing of the c action of many unjust
and onerous customs that have grown up and
been submitted to by the building mechanics of
this city so long that those who have been most
benefited by them have come to consider that
we have no rights that they need respect,
the correction of this condition of affairs is in
your hands.

You have here an organization that if prop-
erly sustained by the earnest and loyal individ-
ual efforts of all its members cannot fail of
these achievements.

It is our perfect right, nay, it would be very
illogical to pursue any other course than that
which would serve the interests of all, as it
must be conceded that any organization that
does not command the loyalty of its own indi-

vidual membership is powerless for good. No formal action on the part of this body is necessary for the accomplishment of all that may be required; in fact, I think such action would not only be imprudent but unnecessary, as each individual, acting for himself can accomplish all that would be necessary to make our Exchange of great value to all.

And now, Mr. President and gentlemen, I ask to be further indulged in the expression of a few thoughts as to how individual members may benefit the whole body by a line of action that is perfectly legitimate.

In the first place, having associated ourselves together for the common good of all, it is not only our privilege but our duty to favor members in our business transactions, in preference to those who are not associated with us; that is to say, all other things being equal, our patronage should be given to members, thereby adding to the value of membership. I do not mean by this that we as a body take any action to ostracize anyone because he may not be associated with us; but as individuals having the interests of our Exchange at heart, we can accomplish all that is needed, and no one can justly take exception to this individual action.

And again, we all know that there are many persons engaged in the building trades who are

not associated with us whose membership would be an advantage, not only by adding to our numbers but to our ability to command a better condition of circumstances, and I have no doubt that by an earnest effort on the part of each member quite an accession to our strength and numbers can be acquired, and should be. Gentlemen, with the position this Exchange has already attained, it is quite within our ability to give it that commanding position whereby it will be the means of accomplishing all that the most sanguine could ask or expect. I but state what is known to all of us when I say that abundant evidence is not wanting to prove the potency of organized effort for the attainment of desired ends. **Also is it equally well known** that it has come to be the recognized mode in all branches of trade or business in which individuals having interests in common adopt as the readiest means of attaining the common good. I argue, therefore, that what has come to be so universally adopted must have much to recommend it. Not only has it been found all-sufficient for the attainment of legitimate ends, but, as is well known to those engaged in some branches of the building business, it is the efficient means of enforcing many onerous, arbitrary and unjust demands; and so firmly estab-

lished has this power become that employers in those branches of trade have come to look upon resistance to any demands, no matter how unreasonable, as useless.

Now, gentlemen, if organized power in the hands of workingmen depending, as many of them are, on the wages of one week to procure the necessities of the next, nay, even more than that, some depending on the earnings of to-day for the necessities of life for to-morrow, is efficient, for the enforcement, not only of reasonable conditions but of many that are unreasonable, surely if men so situated voluntarily subject not only themselves, but their families, to this physical deprivation for what they believe the common good, how much easier is our task, who are required to give a little of our time and go to some little trouble that the common good may be served. It seems to me that we have an example furnished us by these workmen, of loyalty to the common good, as they see it, that we could follow with much advantage to ourselves.

With these evidences of the efficiency of organized effort for the attainment of desired ends, and having an organization such as we have here to-day, I am sure our success is entirely dependent upon ourselves; and if there

was no other reason than the desire common to all men to avoid failure in any undertaking with which they have connected themselves, that of itself should be sufficient to command our best efforts.

Some say that they are not likely to receive or need help from any body of men. A sufficient reply to this deceptive and contracted view is the assertion that no man, I care not how advantageously he may deem himself situated, is or can be independent of his fellows. Nay, more, show me a man holding and acting upon these views, and I will show you one that the world will be no better for his having lived. The belief, I care not by whom entertained, that he is or can be independent of his fellows, is a fallacy of monumental proportions.

The man who by good fortune has attained what may be or seem to him to be a position of independence, and therefore thinks he has no interest in common or duty to his fellowman, has lived to little purpose; and it goes without saying that such a one may safely be put upon the list of those who never will be missed.

It may be thought that these views partake somewhat of the sentimental; and whether that be true or not, a sufficient reply to that thought is the undeniable fact that to t

In Memoriam.

1889.

JOSEPH B. COOPER,
February 21st.

JOSEPH CHAPMAN,
September 10th.

SAMUEL J. CRESWELL,
October 10th.

JOSEPH H. COLLINS,
October 11th.

MILES KING,
October 31st.

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side of man is due much that is best and grandest in the achievements of mankind.

The project to build a Belt-Line Railroad in Philadelphia which, it was hoped, would give the commerce of the city an impetus long needed was heartily indorsed on December 24, 1889. The subject was one with which every member of the Exchange was thoroughly familiar, and having only the best interests of the city at heart the members to a man voted for the resolutions calling upon City Councils to pass the measure granting the proposed road the right of way.

It being close to the time set for the Fourth Annual Convention of the National Association, which was scheduled to meet at St. Paul, Minn., on January 27, 28 and 29, 1890, it was decided to elect the six delegates and six alternates to which the Philadelphia Exchange was entitled. William Harkness, Jr., was elected Delegate-at-Large unanimously. The balloting resulted in the election of David A. Woelpper, Stacy Reeves, William H. Albertson, Franklin M. Harris, Peter Gray and William S. McGinley as Delegates and William B. Irvine, Charles G. Wetter, William B. Carlile, David A. Watts, William Conway and W. Howell Rea as Alternates.

VI.

A special meeting to consider the more important matters to be brought before the National Association was held on January 21, 1890. The Exchange committed itself against the adoption of the Eight Hour System and against the abolition of the Lien Law. The delegates were instructed to do all they could to encourage subcontracting as understood in Philadelphia, also the introduction of Manual Training into the Public Schools.

Little was done at the annual meeting, held on January 28, 1890, many of the more active members being in St. Paul, attending the **Convention of the National Association of Builders**, either as delegates, alternates or visitors. The reports of the various committees were received and read, after which William Gray, Charles Gillingham, William Harkness, Jr., Charles H. Reeves, Samuel Hart, William S. McGinley and Jacob Myers were elected members of the Board of Directors for a term of three years, and Charles P. Bancroft for two years, to complete the unexpired term of Samuel J. Creswell, deceased.

The Philadelphians attending the St. Paul Convention were not idle, as the official report of the proceedings testifies.

THE M 7 W 5 0 1



FRANKLIN M. HARRIS,
SECOND VICE-PRESIDENT, 1892.

FRANKLIN M. HARRIS.

The present Second Vice President of the Master Builders' Exchange of Philadelphia, Franklin M. Harris, was born in the old district of Moyamensing, December 25, 1839. He served an apprenticeship as a builder and entered the Eighteenth Pennsylvania Volunteers (Colonel D. Lewis' regiment) on the 19th of April, 1861, as a private. At the expiration of his service Mr. Harris (Ninety-fifth Regiment) enlisted in Colonel Gosline's Pennsylvania Volunteers) for three months. At the expiration of 1864, when he resigned on account of ill health. His business interests of Philadelphia, for more than twenty-five years, is a member of the Zion lehem Presbyterian Church, and a member of the Board of Directors of the Columbia Club. He has been connected with the erection of many of the largest and handsomest buildings in and about the city—among others, the Drexel building, the plant of the Philadelphia Market Company, Hotel Lafayette, the fine country residences for Justus C. Strawbridge and Isaac H. Clothier, the Philadelphia Times building, the Adams Express building, the building of the Athletic Club of the Schuylkill Navy, the Lehigh Railroad office building at Mauch Chunk, the large laboratory building for Lehigh University at Bethlehem, the Forrest building (Philadelphia), the Industrial School for Boys at Eddington, and the mansion for William L. Elkins on North Broad street. He is now senior member of the firm of Franklin M. Harris & Co., mason builders, No. 1611 Filbert street.

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During the discussion of the subject, "Shall the National Association recommend that subcontracting be encouraged?" Mr. Harris, of Philadelphia, said :

MR. PRESIDENT:—I have the honor to be a subcontractor, simply one of those *poor* fellows that furnish the work and the money and sometimes the brains) to do the work, and after I have done it I am told that Mr. Tom Simpson put up the building, when I may have put into it \$20,000 or \$60,000, where he has only put in about \$5 or \$10. Now, I cannot see why this is class legislation. One gentleman comes here and wants to wipe out the entire lien law in regard to subcontractors, but let it stay for the general contractors. That is the idea. There was a resolution offered here to-day to that effect. The argument was directly to that point, that the lien should only obtain as to the first and the general contractor, if I can understand English. I will say that the subcontractors, as a general thing, are perfectly able to take care of themselves. I think, myself, it is a matter of sentiment as regards who puts up the building or who does not. I am not in the market for sentiment, I am in the market for money. Fortunately I have been associated in all my operations with gentlemen of reputation and

respectability and knowledge. A great deal of what I know I have probably absorbed from them, and I give back to the best of my knowledge and ability; but I want to know what is to hinder any subcontractor being a general contractor.

SEVERAL DELEGATES: Nothing in the world!

Mr. HARRIS: Now, I have been a general contractor half a dozen times, *and I went down into my pocket to get out*. I have got enough of glory. I had a very large job offered to me, and I said to a gentleman that I was connected with, "You take this, and you be the general contractor, and I will take the other part." Says he, "Couldn't you let me make a little **money for once?**" I say I don't care what business the man is in, if he has the knowledge and the ability, he has a right, and there is nothing in the world will stop him from estimating for that work and getting it. I can get any job I want in the town that honors itself by sending me here. There is nothing to hinder any man living who has the ability, as I say, from getting a contract, and I think he will be acknowledged in any city where the force of his ability will rise above the ordinary.

We have, in our city gentlemen who are general contractors, plasterers, carpenters, brick-

layers, stonemasons—I believe they stop about there. I never knew any man to depart that had been a contractor for some time and enter into the ranks of a general contractor without making a great deal of money. There is no question about it. There are a great many who seem to think that the idea of contracting carries with it an immense amount of responsibility. Gentlemen, you are mistaken. The point is, surround yourselves with good subcontractors, and you will slide along with the greatest of ease.

MR. STACY REEVES, of Philadelphia: Mr. President, I want to ask whom are we going to substitute for the general contractor? The architect (that is what will have to be the answer) or the owner? Is it not a fact patent to us all that it has cost us a good deal of labor to rather curtail than add to the privileges that the architect has heretofore exercised over the mechanic? It has been our aim rather to curtail than add to their opportunities to annoy; and when you put him forward as general contractor he will tyrannize over each individual, and he will be twice the man of importance he is to-day. I cannot understand why subcontractors, or gentlemen in other lines, should object any more to working under responsible

general contractors than they would under a respectable owner or architect. I cannot understand why it is. I want to say to you, whilst I am a general contractor, that no man, no general contractor, is any better than his subcontractor has helped to make him. He cannot have good results unless he has good subcontractors with him; and, so far as I know, they get due credit for the manner in which they execute their work. My great objection is, that by this resolution we simply will be increasing the power and influence of the architect, with whom we are not able now to cope. It has been one of our labors to get from him many things that we think he has heretofore withheld. Now, do not add to his power, because there is no man to take the general contractor's place unless it is the architect—the owner hasn't the time or ability. And then where are you going to stop? The lime man, the lumber man, has an equal right to say: "I will not get due credit unless I come immediately in contact with the owner. I don't want to sell this man my lumber, I want to sell to the owner, so I can get due credit for my work." The lime man and the stone man and the sand man might say the same. Where are you going to stop? There will be an army of

men, with the architect, representing the owner, left to deal with, instead of an individual.

MR. EIDLITZ, of New York: Mr. President, I do not understand this subject fully, by any means, but I do want to say this: I have been about forty years in business in the city of New York. I can remember the time when the mason was what they used to call a "big-bug," because he got in building a house about \$350 worth of stone-cutting and about \$150 worth of iron-work, etc., all connected with his contract. Now these things have all changed, and all very naturally. In the work as it is now, for instance, where the iron-work is about as much as the mason's work, the architect and the owner know enough to go direct to the iron-worker or the stone-cutter and give him the contract. But there is one thing, the mason, no matter whether he has all the subcontracts under himself or not, is always about the building. He has already a representative on the building, and somehow or other they will always come for some advice or other either to him or to his foreman. Now then, I do not believe that there is anything really in this matter, for the reason that, whenever a subcontractor finds that he does not desire to work for the contractors he can naturally get the work himself

ses can be built for, say \$150,000. very good. His shoemaker contractor now ears on the scene, and says: "I want you to give me \$150,000 for building these houses." The job is awarded. The shoemaker contractor now goes to a lot of subcontractors, and as he has no object in cutting the subcontractors down to a profit, says: "I have got a big thing. got into an enterprise with a rich man, a... ant to get some subcontractors, carpenters, plasterers, bricklayers, etc., etc. Put in a ty good-sized bid. I have got the thing all fast." They all put in a large bid, and the various portions are awarded to them. They go along and build up about half of the houses. In the meantime the man tells them he has not got much capital, but after he gets to a certain point he is going to make a big drawing, and they will all get their money. Up they go. The first payment he gets probably \$10,000, which he divides around. Keeps \$2000 for his own pocket, and he looks down, and says: "How did I get so much money?" He goes on until the roof is on, and draws another payment. He calls the subcontractors around him and he makes a pretty good payment. The next week he is in Europe, and the men commence to file their liens. Well,

they file them, and they are on file yet, a good many of them. Some of them are dead. For that reason I am opposed to any abrogation of the lien law.

In our State the lien only covers the general contractor and the first subcontractor. The law says it is impossible to trace lower than that. I do not think the lien law has affected anybody in our State to their injury. Good people pay, and bad people are made to pay; that is a punishment which they are entitled to. And that, I think, is what we want. Now, I undertook to wade through this lien law of Chicago one night, and gave it up.

I think it would be wise if a committee were appointed from this Association to examine the different lien laws of the various States, pick out the best, and submit it to the different legislatures, and get it passed. I want you to understand, gentlemen, that the body that is represented here has an immense political power, and if it is used properly can be made to serve its interests and the interests of its constituents. There is no question about that. I mean that any man has a right in this country to use the power that politics gives him, to urge a good measure and see that it is carried out, and I think if some of us would turn our attention to

that, and not have so many lawyers and merchants making laws for us, it would be a great deal better for us.

Mr. PURINGTON, of Chicago: Mr. Harris tells us what can be done with the legislatures, and he suggests that a committee be appointed from this Association to collate the different lien laws, boil them down, digest them, pick out the best of all of them, and then have them adopted by the different legislatures of the different States which we represent here. Now, suppose we did that, and we got the law that just suited us, a law as good as that which our friend Mr. Deeves from New York says they have there, inside of five years we should be just where **New York will be five years hence**, and where they have already begun to drift. According to Mr. Deeves' own statement, amendments upon amendments will be tacked on to the best of laws, until they become equal to the law in Illinois.

Besides that, if a committee of forty or fifty men went to the Legislature at Albany and labored for three or four months, more or less, getting all the laws of the State of New York abrogated, and this new law adopted—if that forty or fifty men could do that, is it not probable that seventy-five or eighty men of equal in-

fluence will, whenever the pinch comes, pitch their tents in front of the State House at Albany, and live there until they get the law repealed and a law passed which suits their particular views ? All good lien laws are in constant danger ; there is a perpetual menace against them. It is precisely this state of things that has brought us, in the State of Illinois, to the deplorable condition in which we now are. Amendments, repeals, enactments upon enactments have been made, until our law, which was originally a good law, has become simply *food for lawyers*. The lawyers themselves don't understand it, and they get their fees out of laws which neither they nor anybody else understand.

There is no question about the hardships of our law in Illinois, and it is from that standpoint that Mr. Prussing and myself and others feel as we do upon this question. There is no question but what we have got our information from experience. We are looking upon the black side of the sheet while our friend in New York is looking at the white. There is a time not far distant when he will be looking on the black side of it. Now, with this necessity of continual turmoil and continual trouble to preserve a law upon the statute books that shall be of any use whatever to us, would it not be better

to do away with such delusive and costly expedients for protection and rely upon the same security that all other sensible business men rely upon—money, credit, reputation?

MR. HARRIS: Will the gentleman allow me to ask him a question?

MR. PURINGTON: Yes, sir.

MR. HARRIS: What help would it be to us to repeal our good laws? Would that help you to repeal the bad ones?

MR. PURINGTON: Do you call your law a good law?

MR. HARRIS: Undoubtedly.

MR. PURINGTON: A law that will enable you to lose \$150,000 every time you want to, whether you want to or not?

MR. HARRIS: No; our legislature repealed that blanket-mortgage law and brought the lien law back to its original standing.

MR. PURINGTON: Have you ever collected a claim under the mechanics' lien law?

MR. HARRIS: I have never had occasion to, but others have.

MR. PURINGTON: It is because you have not had occasion that you do not appreciate the disadvantages of a mechanics' lien law. You have been a wise man and have not relied upon the fancied protection of a lien law, and so have not



ROMAN HOUSE—TIME OF CHARLEMAGNE.

HABITATIONS OF MEN. PARIS EXPOSITION, 1889.

had to resort to it. But less careful men have been tempted to give credit when they should not, and have, as a last resort, crept under the cover of the lien law, in many cases finding when too late that there are as many holes for others to creep out as for them to creep in. We have, in the city of Chicago, a dozen men who have carried a mechanics' lien-law case to the Supreme Court. There is a gentleman in this room to-day who carried a case to the Supreme Court, was some six or seven years, if I recollect rightly, in getting through with it, and he paid more to the lawyers than he received. And that is the usual condition in almost all the States where a lien-law case has been prosecuted to the court of highest resort. The fact of the matter is that lien laws, good or bad, encourage contractors of no real standing and no real credit, and this certainly is a detriment to all reputable contractors.

MR. HARRIS: In Philadelphia we put a lien on and do nothing else, simply let it lie, and we have capitalists there that will buy up those lien claims (they bear six per cent.), and they are glad to get them.

MR. PURINGTON: Taking that for granted, would it not create a better class of building contractors if those who do subwork or sell

materials should insist that the men who obtain credit should obtain it by virtue of their own standing, and not by virtue of a law which says the purchaser is not the man who pays? Would it not improve the *morale* and standing of the building community and of those connected with the building interests, if we, as subcontractors and material men, ascertained the financial standing and the credit and reputation of the contractors to whom we sold material, or entered into the contracts with, before we did it? That is my idea: that the abrogation of all mechanics' lien laws would do more, and that it would be a greater work than any member of this Convention or of this Association has ever entered into, if we could improve the standing of the building community in any way, and I believe that we could do it better this way than in any other. It would root out and eradicate from our midst the irresponsible men who are now taking contracts, and buying our material, and getting our work, with no intention, when they enter into the contracts, of ever paying for them.

MR. REEVES, of Philadelphia: Mr. President, I want to say that in Pennsylvania the lien law we are now working under was passed in 1835. Our people are so well satisfied with it that

they do not want to change it. Men who have worked under that lien law twenty and thirty years do not want to change. We are instructed positively to vote against any change. That shows, notwithstanding some States may have a very objectionable lien law, that we have not the same grievance.

Again, as to the point made by the gentleman, that you would have to look into the character of the man before you sold the material, if there were no lien law, or else you would not sell to him, that, in other words, the irresponsible builder or contractor, from whatever branch he might be, would be unable to get material or labor but for the lien law. Our experience is the reverse of that, in one important point. Our municipal buildings are not lienable under our law in the State of Pennsylvania. We have a large number of schoolhouses—some pretty expensive ones—and I want to say that years ago, more particularly than at present, the men who built those schoolhouses, notwithstanding there was no lien law, notwithstanding the further fact that they were the commonest scalawags in the building trade in Philadelphia, they got all their material readily. We had no lien law, but they got it. I tell you, let a man get a job and he will get his material. That has

been experience. Let a man get his contract he will get his material, notwithstanding his credit may not be good. Who else will you sell it to? He has the contract, and he has the money—if you can get it out of him. And our experience in that particular direction—municipal buildings—has been that the scalawag contractor has been the builder of those buildings with us, and s materials.

MR. ADAMS, of Indiana, is: Mr. President, I have no inclination anything on this matter, and I will add bu word. My friend, Mr. Purington, who is a ve clear-headed man, and always gives a reaso for the faith that is within him, is in the same business in which I am engaged. We are manufacturers of brick: but the conclusion to which he has arrived, from his reasoning, and from his logic, and from his deductions, I cannot indorse. I do not believe, Mr. Chairman, at least I do not wish to believe, that there is any very considerable proportion of this Convention who would throw down the bars, and who would take away a man's protection and the means whereby we may get our money, a means of safety and safeguard, from those who are engaged in the different branches of the building business.

From the time that the first lien law was conceived we have had many and various laws,

but none have ever been made that suited all, none have ever been devised or suggested or conceived that met all cases and requirements. Why, then, Mr. Chairman, because there is an evident weakness in some laws, and because there is a want of equity in others—why should we, by one fell swoop, advise the repeal of all laws, and take away the small measure of protection that we have?

Now, sir, if by repealing lien laws we could improve our condition, better our relations one with another, and serve the best interests of the community, then we should recommend the adoption of Mr. Prussing's motion; but I cannot think of it in that light. I stand, Mr. Chairman, not with my delegation. There is a difference of opinion. We differ, and we can differ in a friendly manner and in good spirit. I, as a member of our General Assembly, endeavored to change our lien laws, and the more I looked into it the less I knew, I am free to say. If I would protect one person I would find another weak. And so, Mr. Chairman, I am willing now to take the best of all, and discard that which we do not desire.

I want to say one thing, suggested by my friend Prussing's argument. My experience may not be in common with that of other gentlemen on this floor, but a good portion of the

Mr. Chairman, I have been asked to speak on the subject of the proposed legislation to prohibit the sale of alcohol to Negroes. I am not qualified to speak on this subject, but I have been requested to do so by my friends, Mr. Chapman, Mr. Clegg, and Mr. Pressing. I think we should take no action on this matter.

The last Convention took a position strong enough and plain enough, at best. And now, if we undertake to put ourselves into a position advocating the repeal of a law in forty-two states, I tell you, Mr. Chairman, we will have a hornet's nest around our heads at the next Convention.

Mr BYRNE, of Buffalo: Mr. President and gentlemen, this question has been discussed several times before our Exchange. We have men no doubt, that carry on as large a business as some of those that advocate doing away with the hen law. But the fact is that from time to time they have had to take advantage of it.

So far as our Exchange is concerned, we are perfectly satisfied with the lien law of the State of New York, and I do not think we can better it. The course which this question has taken would almost lead people to believe that it was dishonest contractors that were upholding the lien law, and that it was the honest ones that wanted to do away with it. Now, I think we have just as honest ones in the State of New York as we have in any portion of the country, and I think it is a bad impression to throw out to the public. We are satisfied with our lien law. If other people are not satisfied with theirs, let them do away with it. That is all I have to say.

MR. BLAIR, of Cincinnati: Mr. President, what I desire to say will be brief, on account of the lateness of the hour. I wish to say that the Cincinnati Exchange did not instruct us as delegates to vote upon this question, but they did, by resolution, affirm, about two weeks before our departure from Cincinnati, that it was the sense of the Exchange that our lien laws in Ohio be maintained, that they were unanimously in favor of the lien law as it stood upon the statute books of Ohio. As I said in the start, we will use no arguments in favor; it is the feeling of our Exchange, and we so express it

to you, gentlemen, who represent your different Exchanges, and we feel as though Cincinnati and the Exchange that we represent ought to be respected. In your vote on this question you ought to think a moment of the feeling of the Cincinnati builders.

MR. C. D. MORSE, of Worcester: Mr. President, in Massachusetts we have a lien law which is not perfect in all respects, but it has been a great advantage to us in our business. In Rhode Island, some two years ago, they made a lien law, and that has been very advantageous, so far as we are concerned. In sixty days you present your bill, and if it is not paid you have a right to put a lien upon the property; and I have been so situated that I have been paid my bill within forty-three hours of the prescribed time. Now, I hope, in all fairness, that we shall not recommend the abrogation of the lien law. We have traveled for quite a while under this present system (I am referring now to New England), and when we have a good thing don't let that go until we find something better; don't give up a good thing for an uncertainty.

MR. MADDEN, of Chicago: Mr. President, on behalf of the people engaged in the stone-cutting and rough-stone business in our city, I desire to say that the delegates from Chicago to

the Convention, representing their interests instructed to vote against the resolution recommending the abrogation of the lien law.

MR. E. D. MILLER, of Baltimore: Mr. President, it has been stated here to-day that the lien law was introduced in the State of Maryland by George Washington and Thomas Jefferson. We have never regretted [redacted] this day, any more than we have for one moment lost confidence in those two great and celebrated men. And allow me to say that I think it would be just as easy a matter to throw over from its foundation the shaft that has been erected to the memory of George Washington as to abolish the lien law in the State of Maryland.

MR. PRUSSING, of Chicago: Mr. President, there seems to be a unanimity of sentiment, which, in order to add a little variety, prompts me to rise at the present time. Gentlemen, I do not have to look for arguments in support of the position taken by me this morning, and I want it understood right here that I am responsible for the position taken. I represent no organized sentiment anywhere, it is my own; I am responsible for the sentiments in that paper. I knew that they would be unpopular, I knew that this Convention would not pass them; I believe that they will not be passed by

the next Convention, but I also firmly believe that they will be passed by a Convention of this body. All things start small. You will read over the published reports of this Convention, you will talk the matter over in your Exchanges, and by and by you will think that maybe there was some little sense in it, anyhow. Gentlemen, if I wanted to look for support for the position taken by myself, I would have to ask Brother Deevs to lend me his pamphlet, and read it to you again. Nothing that I can say would so forcibly back up the position that I have taken as the paper prepared with such great care, and I am in sober earnest when I say just that.

Take Brother Harris' case. He sits right before me: he has entertained us full well on several occasions this afternoon. He told us a story of what happened, and what was sworn to before the legislature. He told you that a block of buildings which was to have cost, by honest, legitimate, competent builders, \$150,000, in the city of Philadelphia, a shoemaker took the contract to build for \$120,000, and found contracting mechanics to agree to put them up. *Those contracting mechanics should have been wiped out, and if they were, it served them right.* Those same men were in the way of Mr. Harris and

every other competent builder, and restricted the prices that he could get for his work. They established the price for that work. Gentlemen, what establishes a builder's price but the fact that somebody offers to do the work at a lower figure than anybody else? Irresponsible competition is the very thing that is generated and fostered by the lien law. That is the great evil. The man who takes off his overalls to-night appears in the morning as good as the best contractor in town, and I don't care whether the name of the town is Philadelphia or St. Paul. He can afford to take work at a less figure than the competent painstaking man, with accumulated savings, can afford to take it. He takes it, and he establishes the price for that work, and Mr. Harris, and Mr. Jones and Mr. Everybodyelse, in order to get something in the scramble, will have to come somewhere near the prices established by irresponsible competitors.

Talk about cheating and defrauding! Yes, that is possible, under the lien law. And why? The corrupt owners and the corrupt contractors go together and lay a scheme to defraud. And Brother Adams and other men in the material line, anxious to dispose of their material, and knowing (some vaguely and others exactly) what the lien law is (the majority of them vaguely),

believing that they are protected by the lien law, sell the material to that irresponsible incompetent. They do not inquire into the business standing and character of the contractor, but they rely on the promises held out to them of a lien. That is the condition of affairs, gentlemen, and for that reason you suffer. Without knowing it, perhaps, to-day, you have not fully realized why the building business, among the large number of businesses carried on, is so DESPISED. The contractor, gentlemen—and I am not speaking of Chicago, I have traveled this country over, from east to west and from north to south—the contractor has, in the majority of cases, been considered next to a thief. Our calling has been degraded by the practices possible under this incubus, the lien law.

Now, gentlemen, I did not introduce this subject here this morning expecting this Convention to carry the resolution appended thereto. Mr. Deerves read a paper in opposition, which wound up by another resolution, in which he recommended the maintenance of all good lien laws. I at once seconded his resolution, and I now move that the entire subject be laid on the table for the next Convention.

The motion was seconded.

The PRESIDENT: That will stop all debate, I think, gentlemen. The motion is made and

seconded to lay the whole subject on the table until the next Convention. All those in favor of the same, please signify it by saying Aye; contrary, Nay. The Chair is in doubt, but is under the impression that it is lost. We will call for a rising vote. All those in favor of laying this entire matter on the table for one year will please rise, and the Secretary will count. Contrary minded. The vote stands fifty-three in favor to thirty-three against, and the subject is therefore tabled for one year.

The President announced that he was in receipt of a letter from ex-President Stevens, as follows :

Rome, Nov. 25, 1889.

To EDWARD E. SCRIBNER, Esq.,

President National Association of Builders:

MY DEAR MR. PRESIDENT:—From this far-distant city I send you greetings, with hopes that this may find you in much better health than when you last wrote me.

I know, from experience, how wearing the duties and responsibilities of your official position are, but sincerely hope you have at hand as efficient lieutenants as I had, and, while you direct and plan, you can leave the details to them.

I look forward to our next Annual Convention with much interest, and cannot find words

to express the regret that I feel when I realize the impossibility of being present on that occasion.

I am satisfied that many important subjects will be brought forward for the consideration of the national body, and trust that wisdom may guide you all in the conclusions arrived at. I am, as all must be, greatly pleased with our official organ, **THE BUILDERS' EXCHANGE**. I see in it a means of communicating thoughts, suggestions and information that cannot help being of great value to the individual bodies forming our National Association. I sincerely trust that the officers of the different organizations will contribute each month largely toward making that part of the paper assigned to them very interesting, and thus, in a measure, relieve the labors of the editor, our already greatly overworked Secretary, who deserves much gratitude for assuming this additional duty.

I do not know that I have any suggestions to offer that would be useful to you, but sincerely trust you may have a very profitable and (as I am sure you will have) a very pleasant gathering.

Give my very kindest regards to all the officers, and to each individual delegate, with the assurance of my regrets at not being with them on the occasion of their gathering.

Possibly I ought to tell you something about our visit to this grand old historical city. On our former visit we contented ourselves simply with sight-seeing, which was done in a very hurried way. Now we are taking it much more leisurely, and per consequence, can examine some matters that were entirely overlooked before.

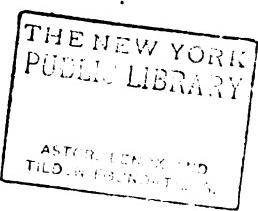
We have availed ourselves of the services of Dr. S. Russell Forbes, archaeological and historical lecturer on Roman antiquities, and with him visited the different localities, and listened to a very interesting descriptive lecture. I find that he has made a study of Roman construction, that is, the material used in building, and the way it is put together. By this means he is able, in a very intelligent manner, to classify the different historical periods of building.

He tells us that the early Greek period in Italy is marked by massive walls of masonry—walls built from the stone of the vicinity, the blocks being rough, as hewn out of a quarry, polygonal. The later Greek period and the Etruscan are identical, being formed of square blocks of stone, headers and stretchers. In the time of the kings of Rome the stones were squared. In the earliest walls they are close-jointed; in the second period the edges are beveled, etc.; and in this way he traces them down to modern times.

ing I was interested in this subject, he gave me a Table of Construction that he had prepared—a copy of which I send you, not expecting you to be as interested as I am in the subject, as I think one must be on the *spot*, and see it all, to appreciate it to its fullest extent. To understand the terms used in the table, he explained them a

"*Opus-incisum*—stones of stone fixed together with mortar, and improved upon, by pieces of stone, of uniform size. Then the stones were cut into wedge shapes, the point being towards, and, being laid in regular rows, has the appearance of network, and is called "*opus-reticulatum*." This kind of work, he told us, went "out of fashion" after the time of Tiberius, but was revived by Hadrian, who always set his reticulated work in bands of brick, like a picture frame—thus easily distinguishing it from the earlier work.

The earliest brick building is the Pantheon. One period of Roman brickwork can easily be distinguished from another by measuring the number of bricks in a foot and noticing the uniformity of size. The brickwork of Nero's time is said to be the best in the world. The bricks are thin and narrow, with very little mortar





EGYPTIAN HOUSE.
HOTEL DES ORIENTS, PARIS. PHOTOGRAPH BY
M. P. L. DE LAURENTIUS.

between them. After his time the work gradually declined, till the cement is as thick as the bricks. The walls were not solid brick all through, but the interior was made of rubble work, the outside course being entire brick, while at every four or five feet all through the construction were laid great tie bricks, to keep the rubble work from shifting. The brickwork was called "*opus-lateritium*." The great tie bricks are usually stamped with the names of the consul or emperor, and the maker.

In the fourth century another system, "operadecadence"—layers of brick and layers of stone. This continued to the thirteenth century. I noticed that where the rubble was used the facing bricks were triangular in shape, thus avoiding a straight joint, and bonding all thoroughly.

I know this must all be very dry and uninteresting to you, but I am certain if you were here you would be as interested as I, not only in these matters but many others. So much has been better said than I can possibly say it, about the buildings, picture galleries, sculpture, etc., that I shall not attempt a word on these subjects.

Yours very sincerely,

JOHN S. STEVENS.

TABLE OF CONSTRUCTION.
TUFA OF THE KINGS.

STYLE.	SPECIMEN.	DATE.
Polygonal	Tusculum
Opus-quadratum, First Pe- riod, squared edges.....	{ Veii Gabii { Palatine Hill..... Second Wall of Rome..... Aventine Hill..... 753 B. C. 746 B. C. 600 B. C. 600 B. C.
Second Period, beveled edges
Opus-quadratum	of Scipio.....	298 B. C.
Opus-uncertum	le of Hope.....	240 B. C.
Opus-uncertum	le of Cybele.....	191 B. C.
Opus-quadratum	rium.....	190 B. C.
	arium	78 B. C.

Now comes the use of the tuffe stone and the brick of the empire.

STYLE.	SPECIMEN.	DATE.
Opus-quadratum	{ Tomb of Cecilia.....	78 B. C.
	Theatre of Marcellus..	13 B. C.
	{ Colosseum.....	80 A. D.
Bricks, 6 to the foot.....	Pantheon.....	20 A. D.
" 8 " "	Aqueduct	60 A. D.*
" 7 " "	Palace.....	80 A. D.
" 6 " "	Temple of Venus.....	120 A. D.
" 7 " "	Nymphaeum.....	170 A. D.
" 5 " "	Baths.....	212 A. D.
	Walls of Rome.....	225 A. D.
	Basilica.....	300 A. D.

* Nero's time.

After the reading of Mr. Stevens' letter the session adjourned.

After much thinking, talking and planning the Master Builders' Exchange of Philadelphia decided on March 25, 1890, that a trade school was needed at once in this city, and that the public

looked to it to start such an institution and maintain it. This had been the intention of the Exchange from the day of its organization, but, for some unknown reason, nothing came of the excellent idea until the subject was introduced formally at this meeting. The Exchange gave \$2500 to help the good cause, the individual members contributed \$3380, and Colonel Richard T. Auchmuty's promised gift of \$9000 was recalled.

Everybody took a hand, and on April 22, 1890, it was reported that the Trade School had \$6500 in its treasury and one year's rental paid (the rental being part of the contribution made by the Exchange). The school was opened on September 2, 1890, less than one-half of the applicants being admitted to the classes as the following table shows:

	ADMITTED.	APPLICANTS.
Carpentry	21	50
Bricklaying	12	42
Plastering	1	2
Stone-Cutting	1	9
Blacksmithing	5	8
Painting	2	4
Plumbing	44	84
	<hr/> 86	<hr/> 199

The lien law was discussed at considerable length at this meeting, and it was finally decided

[REDACTED]

to confer with John G. Johnson, counsel for the Exchange, as to the exact status of the law, it having been seriously affected by a decision of the Supreme Court of the State of Pennsylvania, which held that subcontractors were bound to any agreement signed by the general contractor with whom they might work.

While in Japan Dr. Edward H. Williams, of the Baldwin Locomotive Works, discovered an exquisitely beautiful piece of Oriental workmanship in wood and metal. It had been in the possession of a Japanese family for upwards of ninety years, and was, therefore, held sacred both from a religious standpoint and from its associations as an heirloom in the family. He resolved, if possible, to become the owner of it, and placed the matter in the hands of Mr. Harry Deakin, of Yokohama, the resident partner of the "Curio" house of Deakin Brothers & Co., on whom he felt that he could safely rely, to negotiate the purchase. Mr. Deakin, by the payment of a good, round sum, succeeded in securing the model, and it was duly delivered, packed and shipped to Philadelphia.

Having become the owner of this quaint and curious specimen of human patience, skill and ingenuity, Dr. Williams was desirous that it should not be hidden from public view, but that



DR. EDWARD H. WILLIAMS,
HONORARY MEMBER.



it should be exhibited in some prominent place in this city where mechanics especially might have a free opportunity of seeing it. After considering all the available public institutions where the attention of mechanics and artisans would be attracted to it, he finally selected the **Exhibition Department of the Master Builders' Exchange of Philadelphia**, as the one place of all others where it would be likely to accomplish the most good by being prominently exhibited without cost to the public. He, therefore, presented it to the **Master Builders' Exchange** through his friend Mr. Stacy Reeves, President of the organization, with the understanding that it would be given a permanent location in a prominent part of the **Exhibition Room**.

When the model arrived at the **Exhibition Room**, and the boxes, ropes and wrappings with which it had been encased were removed, it was found that owing to defective and careless packing a number of the small parts, both of the wood and of the metal work, were broken, and that the temple was apparently ruined. Regretting the misfortune, but hopeful, however, of being able to repair the damage, the ingenuity of the Yankee mechanic was brought into play to imitate the handiwork of the

Japanese artisans, and skilled workmen in wood and metal were employed to replace the broken parts.

The success which attended their patient efforts is best demonstrated by the model itself, as the closest scrutiny will fail to distinguish the restored parts from the old.

The model represents a Japanese temple dedicated to Shintô worship. It is said to be an exact imitation in miniature of one of the temples located at the shrines of Nikkô, a place sacred to Shintô worshipers, about one hundred miles north of the city of Tokio. It is probable that the original temple from which this model was made is no longer in existence, as, owing to the damp climate of that portion of Japan, the woodwork of all buildings subjected to the action of the elements soon decays, and, therefore, requires frequent renewals, and this model, being nearly one hundred years old, as stated, it is likely that the original has long since passed away.

In Japan there existed but two forms of religion previous to the opening of the country to foreigners consequent upon the treaty made between Commodore Perry, of our navy, and the mikado. These were, respectively, **Buddhism** and **Shintôism**. The forms are similar in

respects, but the former is showy, with temples highly decorated, rich in lacquer, gold and bright colors, both within and without, while the Shintô worship is more quiet. The buildings are similar in general design to the Buddhist temples and monasteries, but there is an entire absence of color other than the natural wood and the bronze which is used for protecting the ends of timbers, for washers, etc. There are no showy altars, there is no furniture—nothing but a mirror and one or two other unobtrusive things.

The typical Shintô temple, with its emblems, may be thus briefly described: The temple proper consists of a chapel (*honsha* or *hon-den*) divided into two chambers. In front stands a wand, from which depend pieces of white paper cut out in a particular form and intended to resemble the offerings of cloth tied to the branches of the cleyera bush, such as in ancient times were made at festivals, and probably left hanging all the year round. In recent years, by a reversion to the traditional practice, it has become the fashion to offer strips of colored cloth. The mirror which is seen in the centre or back of the chapel in most of the temples was borrowed from the Buddhists of the Shingon sect during the period of the predominance of

and has nothing to do with Shintô. It is derived from the mirror hidden in the recesses of the temple, as the "emblem" of a deity. A gong sometimes forms part of the furniture.

Behind a grating in the rear is a sanctum, within which not even the chief priest may intrude, except on rare occasions, where the "emblem" of the god is kept enshrined in box within box, and wrapped in innumerable wrappings of silk and gold. Tradition alone informs us in each case what this emblem, or *mi-tama-shiro* (representation of the august spirit), is—sometimes a mirror, or a sword, or a curious stone, or even a shoe, the mirror being characteristic of female, the sword of male deities. A possible explanation of the absence of images or pictorial representations of the deity may be that in the earlier stages of Shintô, and previous to the introduction of the arts in conjunction with Buddhism, the Japanese people were ignorant of sculpture and painting.

"Shintô" means "the way of the gods," and could not be classed as a religion until the introduction of Buddhism, somewhere about A. D. 550. Previous to that date, the ancestors of the mikado were worshiped in addition to wind gods, the god of fire, of food, of pestilence, etc.

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TROW



MODEL OF JAPANESE TEMPLE
IN BUILDERS' EXCHANGE PERMANENT EXHIBITION.

Fire was considered the purifier—there was no heaven or hell, but a sort of dreamy hereafter. The temples at that period, and in some instances at the present time, were plain structures with no ornamentation, and with thatched roofs. The Buddhist priests, as a matter of policy, took up with the Shintô gods, and in many instances served in the Shintô temples, introducing the carvings and some other architectural ornaments, as carved woodwork was introduced by them when they came from Corea to Japan. The Shintô worship languished until about 1700, when patriotic pride induced a revival of the national religion, in contradistinction to Buddhism and Confucianism, and thousands of temples were stripped of Buddhist ornamentation and handed over to the disciples of Shintô; but in these, as in the majority of Shintô temples, carvings are introduced, as in the model exhibited. The dragon is a powerful adjunct in Japanese mythology. The legend runs that the dragon was formed from a sacred vapor which rose from the food bowl of a "Rakan," a sort of holy man who determined to starve himself to death; this vapor formed a cloud which assumed the shape and attributes of the dragon. This creature was the grandmother of the first mikado, and is not an object

of terror, but is considered a protector, and, therefore, is largely introduced in sacred places and among decorated objects generally.

In this connection it is eminently proper to describe the shrines of Nikkō, from whence the model came. Isabella A. Bird, in "Unbeaten Tracks in Japan," gives a most delightful pen-picture of these gorgeous places, as follows:

"Nikkō has a distinct individuality. This consists not so much in its great beauty and variety, as in its solemn grandeur, its profound melancholy, its slow and sure decay, and the historical and religious atmosphere from which one can never altogether escape. It is a place of graves, too; of constant rain and strange stillness; and its glories lie in the past. I have paid almost daily visits to the famous shrines; but their descriptions are so profuse and their mythological allusions so complicated that, instead of attempting any detailed description, I must content myself with giving the slightest possible sketch of what I suppose may fairly be ranked among the most beautiful scenes in the world.

"Nikkō means 'sunny splendor,' and its beauties are celebrated in poetry and art all over Japan. Mountains, for a great part of the year clothed or patched with snow, piled in

great ranges round Nantaisan their monarch, worshiped as a god; forests of magnificent timber; ravines and passes scarcely explored; dark green lakes sleeping in endless serenity; the deep abyss of Kêgon, into which the waters of Chiuzenjii plunge from a height of 250 feet; the bright beauty of the falls of Kiri Furi; the loveliness of the gardens of Dainichido; the sombre grandeur of the passes through which the Daiyagawa forces its way from the upper regions; a gorgeousness of azaleas and magnolias; and a luxuriosness of vegetation, perhaps unequaled in Japan, are only a few of the attractions which surround the shrines of the two greatest Shôguns.

“To a glorious resting-place on the hill-slope of Hotoké Iwa, sacred since 767, when a Buddhist saint, called Shôdô Shônin, visited it, and declared the old Shintô deity of the mountain to be only a manifestation of Buddha, Hidetada, the second Shôgun of the Tokugawa dynasty, conveyed the corpse of his father Iyéyasu in 1617. It was a splendid burial. An imperial envoy, a priest of the mikado’s family, court nobles from Kiyôto, and hundreds of *daimiyos*, captains and nobles of inferior rank, took part in the ceremony. An army of priests in rich robes during three days intoned a sacred classic

10,000 times, and Iyéyasu was deified by a decree of the mikado under a name signifying 'light of the East, great incarnation of Buddha.' An envoy of high rank was subsequently sent by the emperor to the shrine once a year, to offer not the ordinary *gohei*, or shreds of paper attached to a long wand, which are to be seen in every Shintô shrine, but *gohei* solidly gilt.

"The other Shôgun who is buried here is Iyémitsu, the able grandson of Iyéyasu. He finished the Nikkô temples and those of Toyisan at Uyeno, in Yedo. The less important Shôguns of the line of Tokugawa are buried in Uyeno and Shiba, in Yedo. Since the restoration, and what may be called the disestablishment of Buddhism, the shrine of Iyéyasu has been deprived of all its glories of ritual and its magnificent Buddhist paraphernalia; the 200 priests who gave it splendor are scattered, and six Shintô priests alternately attend upon it as far as for the purpose of selling tickets of admission, as for any priestly duties.

"All roads, bridges and avenues here lead to these shrines, but the grand approach is by the Red Bridge, and up a broad road with steps at intervals and stone-faced embankments at each side, on the top of which are belts of cryptomeria. At the summit of this ascent is a fine

granite *torii*, twenty-seven feet six inches high, with columns three feet six inches in diameter, offered by the *daimyo* of Chikuzen in 1618 from his own quarries. After this come 118 magnificent bronze lanterns on massive stone pedestals, each of which is inscribed with the posthumous title of Iyéyasu, the name of the giver, and a legend of the offering—all the gifts of *daimyo*—a holy water cistern made of a solid block of granite, and covered by a roof resting on twenty square granite pillars, and a bronze bell, lantern and candelabra of marvelous workmanship, offered by the kings of Corea and Liukiu. On the left is a five-storied pagoda, 104 feet high, richly carved in wood, and as richly gilded and painted. The signs of the zodiac run round the lower story.

“The grand entrance gate is at the top of a handsome flight of steps forty yards from the *torii*. A looped white curtain with the mikado’s crest in black hangs partially over the gateway, in which, beautiful as it is, one does not care to linger, to examine the gilded *amainu* in niches, or the spirited carvings of tigers under the eaves, for the view of the first court overwhelms one by its magnificence and beauty. The whole style of the buildings, the arrangements, the art of every kind, the thought which inspired

the whole, are exclusively Japanese, and the glimpse from the *Ni-o* gate is a revelation of a previously undreamed-of beauty, both in form and color.

Round the neatly-pebbled court, which is inclosed by a bright red-timber wall, are three gorgeous buildings, which contain the treasures of the temple, a sumptuous stable for the three sacred Albino horses which are kept for the use of the god, a magnificent granite cistern of holy water, fed from the Sôgendaki cascade and a highly-decorated building, in which a complete collection of Buddhist Scriptures is deposited. From this a flight of steps leads into a smaller court containing a bell-tower of marvelous workmanship and ornamentation, a drum tower hardly less beautiful, a shrine, a candelabra, bell and lantern mentioned before, and some very grand bronze lanterns.

From this court another flight of steps ascends to the Yomei gate, whose splendor I contemplated day after day with increasing astonishment. The white columns which support it have capitals formed of great red-thatched heads of the mythical *kirin*. Above the architrave is a projecting balcony, which runs all round the gateway with a railing carried by dragons' heads. In the centre two white

dragons fight eternally. Underneath, in high relief, there are groups of children playing, then a network of richly-painted beams, and seven groups of sages. The high roof is supported by gilded dragons' heads with crimson throats. In the interior of the gateway there are side niches painted white, which are lined with gracefully-designed arabesques founded on the *botan* or peony. A piazza, whose outer walls of twenty-one compartments are enriched with magnificent carvings of birds, flowers and trees, runs right and left, and incloses on three of its sides another court, the fourth side of which is a terminal stone wall built against the side of the hill. On the right are two decorated buildings, one of which contains a stage for the performance of the sacred dances, and the other an altar for the burning of cedar-wood incense. On the left is a building for the reception of three sacred cars which were used during festivals. To pass from court to court is to pass from splendor to splendor, one is almost glad to feel that this is the last, and that the strain on one's capacity for admiration is nearly over.

"In the middle is the sacred inclosure, formed of gilded trellis-work, with painted borders above and below, forming a square, of which each side measures 150 feet, and which contains the *haiden*

or chapel. Underneath the trellis-work are groups of birds with backgrounds of grass, very boldly carved in wood and richly gilded and painted. From the imposing entrance through a double avenue of cryptomeria, among courts, gates, temples, shrines, pagodas, colossal bells of bronze, and lanterns inlaid with gold, you pass through this final court bewildered by magnificence, through golden gates, into the dimness of a golden temple, and there is—simply a black lacquer table with a circular metal mirror upon it!

“Within is a hall finely matted, forty-two feet wide, by twenty-seven from front to back, with lofty apartments on each side, one for the Shôgun and the other ‘for his Holiness the Abbot.’ Both, of course, are empty. The roof of the hall is paneled and richly frescoed. The Shôgun’s room contains some very fine *fusuma*, on which *kirin* (fabulous monsters) are depicted on a dead-gold ground, and four oak panels, eight feet by six, finely carved, with the phoenix in low relief variously treated. In the abbot’s room there are similar panels adorned with hawks spiritedly executed. The only ecclesiastical ornament among the dim splendors of the chapel is the plain gold *gohei*. Steps at the back lead into a chapel paved with

with a fine paneled ceiling representing dragons on a dark-blue ground. Beyond this some gilded doors lead into the principal chapel, containing four rooms which are not accessible, but if they correspond with the outside, which is of highly-polished black lacquer relieved by gold, they must be supremely magnificent.

"But not in any one of these gorgeous shrines did Iyéyasu decree that his dust should rest. Re-entering the last court, it is necessary to leave the inclosures altogether by passing through a covered gateway in the eastern piazza into a stone gallery, green with mosses and hepaticæ. Within, wealth and art have created a fairyland of gold and color; without, nature, at her stateliest, has surrounded the great Shôgun's tomb with a pomp of mournful splendor. A staircase of 240 stone steps leads to the top of the hill, where, above and behind all the stateliness of the shrines raised in his honor, the dust of Iyéyasu sleeps in an unadorned but Cyclopean tomb of stone and bronze, surmounted by a bronze urn. In front is a stone table decorated with a bronze incense burner, a vase with lotus blossoms and leaves in brass, and a bronze stork bearing a bronze candlestick in its mouth. A lofty stone wall, surmounted by a balustrade, surrounds the simple but

s. losure, and cryptomeria of large size growi p the back of the hill create perpetual twilight around it. Slant rays of sunshine alone pass through them, no flower blooms or bird sings, only silence and mournfulness surround the grave of the ablest and greatest man that Japan has produced.

"Impressed as I had been with the glorious workmanship in wood, bronze and lacquer, I scarcely admired less the masonry of the vast retaining walls, the stone gallery, the staircase and its balustrade, all put together without mortar or cement, and so accurately fitted that the joints are scarcely affected by the rain and the damp, aggressive vegetation of 260 years. The steps of the staircase are fine monoliths, and the coping at the side, the massive balustrade, and the heavy rail at the top, are cut out of solid blocks of stone from ten to eighteen feet in length. Nor is the workmanship of the great granite cistern for holy water less remarkable. It is so carefully adjusted on its bed that the water brought from a neighboring cascade rises and pours over each edge in such carefully equalized columns that, as Mr. Satow says, 'it seems to be a solid block of water rather than a piece of stone.'

"The temples of Iyémitsu are close to those of Iyéyasu, and, though somewhat less

magnificent, are even more bewildering as they are still in Buddhist hands, and are crowded with the gods of the Buddhist Pantheon and the splendid paraphernalia of Buddhist worship, in striking contrast to the simplicity of the lonely Shintô mirror in the midst of the blaze of gold and color. In the grand entrance gate are gigantic *Ni-o*, the Buddhist Gog and Magog, vermilion colored, and with draperies painted in imitation of flowered silk. A second pair, painted red and green, removed from Iyémitsu's temple, are in niches within the gate. A flight of steps leads to another gate, in whose gorgeous niches stand hideous monsters in human form, representing the gods of wind and thunder. Wind has crystal eyes, and a half jolly, half demoniacal expression. He is painted green, and carries a wind-bag on his back—a long sack tied at each end, with the ends brought over his shoulders and held in his hands. The god of thunder is painted red, with purple hair on end, and stands on clouds, holding thunderbolts in his hand. More steps, and another gate containing the Tennô, or gods of the four quarters, boldly carved and in strong action, with long eye-teeth, and at last the principal temple is reached. An old priest who took me over it on my first visit, on pass-

ing the gods of wind and thunder said: 'We us to believe in these things, but we don't now,' and his manner in speaking of the other deities was rather contemptuous. He requested me, however, to take off my hat as well as my shoes at the door of the temple. Within there was a gorgeous shrine, and when an acolyte drew aside the curtain of cloth of gold the interior was equally imposing, containing Buddha and two other figures of gilded brass, seated cross-legged on lotus flowers, with rows of petals several times repeated, and with that look of eternal repose on their faces which is reproduced in the commonest roadside images.

"In front of the shrine several candles were burning, the offerings of some people who were having prayers said for them, and the whole was lighted by two lamps burning low. On a step of the altar a much-contorted devil was crouching uneasily, for he was subjugated, and by a grim irony made to carry a massive incense burner on his shoulders. In this temple there were more than a hundred idols standing in rows, many of them life-size, some of them trampling devils under their feet, but all hideous, partly from the bright greens, vermilions, and blues with which they are painted. Remarkable muscular development characterizes

In Memoriam.

1890.

WILLIAM ARMSTRONG,
May 22d.

WILLIAM S. McGINLEY,
August 4th.

ARTHUR H. WILLIAMS,
September 30th.

DAVID COULTER,
December 8th.



all, and the figures and faces of all are in vigorous action of some kind, generally grossly exaggerated.

"For the second time I noticed the singular contrast between the horrible or grotesque creations of Japanese religious fancy, with their contorted figures and gaudy, fly-away tags of dress, and the Oriental calm of face, figure, and drapery of the imported Buddha, the creation of the religious art of India. The teeth of all the Japanese gods in this temple were most unpleasantly conspicuous. Some idols (such as the farmers' and sailors' gods) were in shrines, and there were many small offerings of rice and sweet-meats before them. The priests sell pieces of paper inscribed with the names of these divinities as charms against shipwreck and failure of the rice crops."

A project to establish a system of rapid transit in this city was indorsed at this meeting, and John S. Stevens, John Kisterbock and J. Stein Thorn were appointed a committee to operate with the projectors of the enterprise.

The delegates and alternates to the Fifth Annual Convention of the National Association of Builders, to be held at New York, were elected on December 23, 1890, as follows: Stacy Reeves, John S. Stevens, Charles Gillingham,

Murrell Dobbins, Samuel Hart and John Kisterbock, delegates; George Watson, Franklin M. Harris, David A. Woelpper, William B. Irvine, John J. Weaver and Peter Gray, alternates.

Building laws, good, bad and indifferent, were considered at a meeting held on December 30, 1890, in which representatives of the Operative Builders' Association, the Board of Fire Underwriters and the Board of Building Inspectors participated. The subject was thoroughly canvassed and an entirely new bill, intended as a substitute for all existing laws regulating the construction of buildings in Philadelphia, was drafted, approved and referred back to the committee framing it for further consideration.

STANLEY REEVES, the newly-elected President of the Exchange, presided over the annual meeting held on January 27, 1891, upon which occasion it was decided not to join the Bourse about to be erected in this city. The reason for this decision was that the Exchange owned and occupied a building in every way suited to its requirements, and one which was a source of revenue to the organization.

A communication was received from the Committee of Fifty for a New Philadelphia, inviting the Exchange to co-operate with that body in their efforts to secure needed reforms.

The Labor Committee of the Exchange, in the report submitted at this meeting, recommended that all employers and employes in the building trades should meet in conference at least once each year, at which time an agreement should be entered into governing the hours and wages for the ensuing year.

Eight vacancies in the Board of Directors were filled by the election of George Watson, George W. Roydhouse, John Atkinson, J. Stein Thorn, Fred. F. Myhlertz, William H. Albertson, Charles G. Wetter and Joseph E. Brown. Mr. Brown being elected to fill the unexpired term of William S. McGinley, deceased.

On February 9, 1891, a special meeting was held to consider the following bill, which was passed by the legislature and finally approved by Governor Robert E. Pattison on June 8, 1891:

AN ACT SECURING THE RIGHT OF SUBCONTRACTORS TO FILE MECHANICS' LIENS, AND PREVENTING INTERFERENCE WITH THIS RIGHT BY CONTRACTS.

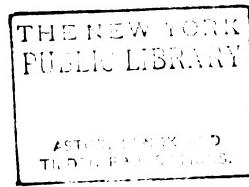
SECTION 1.—*Be it enacted, etc.,* That no contract which shall hereafter be made for the erection of the whole, or of any part, of a new building with the owner of the lot on which the same shall be erected, shall operate to interfere

with or to defeat the right of a subcontractor who shall do work or shall furnish materials under agreement with the original contractor in aid of such erection to file a mechanic's lien for the amount which shall be due for the value of such work or materials furnished, unless such subcontractor shall have consented in writing to be bound by the provisions of such contract with the owner in regard to the filing of liens. Without such written consent of the subcontractor all contracts between the original contractor and the owner which shall expressly or impliedly stipulate that no such lien shall be filed shall be invalid as against the right of such subcontractor to file the same.

SECTION 2.—All persons contracting with the owner of ground for the erection or construction of the whole or of any part of a new building thereon shall be deemed the agent of such owner in ordering work or materials in and about such erection or construction, and any subcontractor doing such work or furnishing such materials shall be entitled to file a mechanic's lien for the value thereof within six months from the time the said work was completed by said subcontractor, notwithstanding any stipulations to the contrary in the contract between the owner and the contractor, unless



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GEORGE WATSON,
PRESIDENT, 1891.

GEORGE WATSON.

Without opposition, and with the very best wishes of his friends, George Watson, a carpenter, was elected in January, 1891, to succeed Stacy Reeves as President of the Master Builders' Exchange, being the fourth called upon to fill that position. He was born October 21, 1826, at Buckingham, Bucks county, Pa. When four years old his parents removed to this city, where he was educated at the Friends' school. After his school days he served five years' apprenticeship with his brother, James V. Watson. On reaching man's estate, he was admitted to partnership, the firm name being James V. Watson & Bro. This partnership continued until 1857, when the senior member withdrew. In 1886 Mr. Watson admitted his son, George J. Watson, to partnership, the name of the firm being changed to George Watson & Son. Mr. Watson enjoys a well-earned reputation for fair dealing and integrity. He has been closely identified with the movement to establish mechanical trade schools in Philadelphia, under the auspices of the Master Builders' Exchange, and much credit is due him for the excellent results already achieved by that institution. In addition to this he is prominently identified with a number of other educational and philanthropic enterprises, being a director of the Friends' High School at Fifteenth and Race streets, and a director of the House of Refuge, on which Board he occupies the important position of Chairman of the Committee on Employment, and is now actively engaged with his colleagues of that Committee in establishing a school of mechanical trades in connection with the Refuge. Of financial enterprises he is a director in the Lumbermen's Insurance Company, and also of the Consolidation National Bank, of which his brother and former partner, James V. Watson, is President and George Watson Acting-President, in the absence of that official.

such stipulations shall have been consented to in writing by such subcontractor.

To secure the passage of this law the Master Builders' Exchange of Philadelphia, through the Legislative Committee, of which Franklin M. Harris was chairman, forwarded 25,000 circulars to builders and others interested in the business in Pennsylvania, calling upon them to urge their representatives in the legislature to work and vote for the bill. So effective was this work that only one dissenting vote was recorded in the Lower House, and the Senate passed it unanimously.

It was a Philadelphian—John S. Stevens—who nominated Colonel Richard T. Auchmuty, the pioneer of trade schools in America, for honorary membership in the National Association of Builders at the second day's session of the Fifth Annual Convention of that Association, at New York. It was George Watson, of Philadelphia, who seconded the motion, which was passed unanimously. During the succeeding sessions of the Convention the representatives of the Philadelphia Exchange were heard in support of arbitration as the best means of settling all manner of labor disputes; in favor of compelling general contractors, owners and architects to respect the rights of subcontractors.

support of a movement to prevent tampering with estimates; and in favor of a uniform apprenticeship system and mechanical trade-school extension.

Fifty members of the Master Builders' Exchange of Philadelphia enjoyed the banquet given in honor of the National Association, at Lenox Lyceum, New York, on the evening of February 12.

The Lenox Lyceum, is, perhaps, better adapted for such an affair than any other building in the United States, is very large, circular in shape and beautiful in design. The decorations were of a very superior character, and the general effect was extremely beautiful. Two tiers of boxes which encircle the room were almost hidden by great banks of flowers and plants. The lower tier contained a very effective arrangement of cut flowers and plants in bloom, with a dark background of foliage, among which was interspersed a great number of small electric lights. The upper boxes were filled with a variety of large palms, whose artistic grouping and outlines, standing out in strong relief against the light background of the walls, made a most charming contrast to the decoration of the lower boxes, and completely destroyed any semblance of bareness that might otherwise have been apparent.

The platform upon which was set the table at which the speakers of the evening were seated was remarkable for the beauty of its decoration; the whole front, from the floor to a line slightly lower than the edge of the table, presenting the appearance of a bank of roses in full bloom.

The banqueting tables were placed at right angles with the stage, across the entire extent of the vast room. Short distances apart on each table were placed great bouquets of cut flowers, filling the air with fragrance. Beside each plate was placed one of the most novel and appropriate souvenirs of the occasion that could have been devised, in the shape of a menu card, fashioned in terra-cotta tile of most delicate workmanship and unique design, bearing the menu in raised letters, between two Ionic pillars, supporting a straight arch, which bore the words: "Mechanics' and Traders' Exchange of New York."

The music for the occasion was furnished by the Theodore Thomas Orchestra, which was placed in an elevated position directly opposite the platform occupied by the speakers.

Everything had been executed with such taste that the room presented a most enchanting appearance, and the dining of the 900 guests

was accomplished in a thoroughly satisfactory manner.

The last course served, Toast-master Mr. William C. Smith rapped for silence and announced the first toast as follows:

GENTLEMEN OF THE NATIONAL ASSOCIATION OF BUILDERS:—Before I introduce to you the distinguished gentlemen who are to respond to our toasts this evening, I desire, on behalf of the members of the general society of the Mechanics' and Traders' Exchange of the City of New York, to express to you the gratification and satisfaction that we have experienced in being honored by having our city selected as the place for holding your Fifth Annual Convention. [Applause.] Perhaps I cannot better describe the extent of the industry which you represent than by reference to its geographical limits. The monetary interests of our country gather in certain great financial centres; our maritime and mercantile interests are attracted to the seaboard and our water-ways; our manufacturing and our mining industries naturally locate themselves in localities possessing special physical advantages; even that great representative of our nation's strength, agriculture, progresses along certain well-defined geographical belts; but wherever the march of civilization

sets its foot, there the builder goes also. [Applause.] Crude may be his efforts in the first instance, but, gentlemen, he goes to stay ; his work is never done ; ever increasing and improving his opportunities for usefulness as the population and material welfare of his locality increases. Your field of operations, gentlemen, is only confined by the boundaries of your country. May those operations be so enduring that they may inspire in you and in our country a patriotism worthy of the noble future of your industries and of our country. [Applause.] I propose for the first toast this evening "Our Country—whether bounded by the St. John's and the Sabine, or however otherwise bounded or described, and be the measurements more or less—still our country, to be cherished in all our hearts, to be defended by all our hands." [Applause.] Builders, I have the honor to introduce to you a gentleman whose name is a household word throughout this great land, our first citizen, ex-President Grover Cleveland. [Great applause.]

MR. PRESIDENT AND GENTLEMEN :—When American citizens are gathered together on occasions like this, and the hour of feasting is supplemented by toast and sentiment, it is surely fitting that "Our Country" should be prominent

among the topics proposed for thought and speech. Evidence is thus furnished of the ever-present love and affection of our people for their country, prompting them at all times and in all places to yield to her ready recognition and homage.

The conspicuous place which this occupies in American thought is the result of our relations to the land which we possess and to the government under which we live. Our vast domain belongs to our people. They have fought for it, and have labored hard for its development and growth. Our government, too, was fashioned and established by and for our people, and is sustained and administered at their behest. Subjects of other lands less free than ours, and in which no mediante governments further removed from popular control, may boast of their country in a spirit of natural pride and enthusiasm, and as sharers in its splendor and grandeur. They thus exhibit their submission and allegiance and an habitual regard for constituted authority. But the enthusiasm which warms the hearts at the mention of "Our Country" grows out of our sense of proprietary and individual right in American institutions. It is mingled with no servile gratitude to any ruler for scant freedom generously conceded to us.

nor with admiration of monarchical pomp and splendor. The words "Our Country" suggest to us not only a broad domain which is ours, but also a government which is ours, based upon our will, protected and guarded by our love and affection, vouchsafing to us freedom limited only by our self-imposed restraints, and securing to us as our right absolute and impartial justice.

[Applause.]

When we consider the extensive growth of our country—its cities and villages, and all the physical features which contribute so much to give to it a foremost place in the civilization of the age—we are bound to acknowledge that the builders of our land have had much to do with securing for us the commanding position we hold among the nations of the earth. It may, indeed, be said that all the nations which have ever existed have, like us, been largely indebted for the grandeur and magnificence of which they could boast to those belonging to the vocation represented in this assembly. It will be impossible to find a complete description of any country, ancient or modern, which does not mention the size and character of its buildings and its public and private edifices.

I do not intend to do injustice, in the enthusiasm of this hour, to any of the trades and

o~~s~~ tions which have contributed to make our country and other countries great. But truth and candor exact the confession that the chief among these occupations in all times past has been that of the builder. He began his work in the early days of created things, and has been abroad among the sons of men ever since.

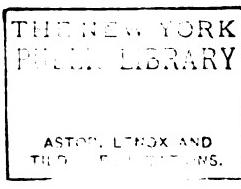
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work in that emer-
m a watery grave;
and if we suffer at the hands of his successors,
in these modern times, we should allow his first
son to plead loudly in his behalf. [Laughter.]
If in these days we are vexed by the failure of
the builder to observe plans and specifications,
let us bear in mind that in his first construction
he, fortunately for us, followed them implicitly.
The gopher wood was furnished, the ark was
pitched within and without, it was built three
hundred cubits long, fifty cubits broad, and
thirty cubits high: the window was put in, the
door was placed in the side, and it had a lower,
a second and a third story. If we are now and
then prompted almost to profanity because the

PERSIAN HOUSE—400 YEARS BEFORE THE CHRISTIAN ERA.

Habitation de Mén, Paris Exposition, 1862.





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TILDEN FOUNDATIONS.

builder has not completed our house within the time agreed, let us recall with gratitude the fact that the ark was fully completed and finished in a good and workmanlike manner and actually occupied seven days before the waters of the flood were upon the earth. [Laughter.] If a feeling like paralysis steals over us when a long account for extra work is placed before our affrighted eyes, let us be reconciled to our fate by the thought that there was no charge for extra work in the construction of the ark, and that the human race was saved without that exasperating incident. [Laughter and applause.]

We sometimes hear things which are calculated to convey the impression that there is an irrepressible conflict raging between our builders and the rest of our people. If any such thing exists I desire to suggest, in behalf of the builders, that it may to a great extent arise from the uncertainty prevailing among employers concerning their wants and what they can afford to have. These are days when the free-born and ambitious American citizen does not like to be outdone by his neighbor or anyone else. If, as a result of this, a man with fifty thousand dollars to spend for a home is determined to have one as good and as extravagant as that of another man who has twice the

amount to invest for the same purpose, the builder certainly ought not to be blamed if he fails to perform that miracle. [Laughter.] On the other hand, it has sometimes seemed to me that when an honest, confiding man applies to a builder for an estimate of the cost of a construction which he contemplates he ought to receive more definite and trustworthy figures than those frequently submitted to him. I am inclined to think, however, that on the whole the relations of the builder with his fellow-men have been fairly amicable. If this were not so, and if disputes and misunderstandings were ordinary incidents of building contracts, it is quite apparent that the buildings which have been put up in our country would have caused enough of quarrels not only to endanger our social fabric, but to transfer much of the wealth now in the hands of builders and their patrons to the pockets of the members of that peaceful and honest profession to which I have the honor to belong. [Laughter.] Though this latter result would not be altogether mournful, the legal profession are so patriotic and so easily satisfied that I am quite certain they are contented with existing conditions.

The National Association of Builders gives promise in its declared objects and pur-

much usefulness. It recognizes the fact that the relation its members bear to vast numbers of our wage earners furnishes the opportunity for them to do an important and beneficent work in the way of reconciling differences between employers and employes and averting unprofitable and exasperating conflicts. All must commend the desire of the organization for the adoption of effective precautions against accident and injury to employes and for some provision for such as are injured or incapacitated for work. And all our people ought especially to appreciate the efforts of your Association to aid in the establishment of trade schools for the education and improvement of apprentices. [Applause.] Of course, no one will deny that a workman in your vocation who labors intelligently and with some knowledge of the underlying reason for his plan of work does more and better service than one who pursues his round of daily toil unthinkingly and as a mere matter of routine or imitation. Herein is certainly a palpable advantage to the workman, to the builder and to his patron. But the value of a trade-school education is not thus limited. The apprentice not only becomes a better workman by means of the education and discipline of such a school, but that very

process must also tend to make him a better citizen. While he learns the things which give him an understanding of his work and fit his mind and brain to guide his hand, he also stimulates his perception of that high service which his country claims of him as a citizen. [Applause.]

For this service he and all of us have placed in our hands the suffrage of freemen. It is only faithfully used when its exercise represents a full consciousness of the responsibilities and duties which its possession imposes, and when it is guided and controlled by a pure conscience and by thoughtful, intelligent and independent judgment. [Applause.]

-Neither walls, theatres, porches, nor senseless equipage make States, but men who are willing to open themselves."

As a concluding thought, let me suggest that though the builders of the United States may erect grand and beautiful edifices which shall be monuments of their skill and evidences of our nation's prosperity, their work is not well done and their duty wholly performed unless, in pursuance of their contract of citizenship, they join with all their fellow-countrymen in building and finishing in beautiful proportions the grandest and most commanding of all earthly structures —“Our Country.” [Great applause.]

The last speech of the evening was that of John S. Stevens, of Philadelphia, who said :

MR. PRESIDENT AND GENTLEMEN:—I feel greatly honored by being asked to respond to the toast “Sister Exchanges,” although I do not flatter myself enough to suppose that the compliment was intended for me, but rather for the Exchange which I have the honor to represent in the Convention. I shall not attempt to describe what my idea of a model Builders’ Exchange is, as the Convention has decided to visit a neighboring city to-morrow for the inspection of one which has partly realized my conception of such an institution, and you will then hear a brief history of its inception and progress. I might say in passing that all honor is due to our Boston brethren for their valuable example, and the Secretary of that Association, our own honored Sayward, for his assistance and advice in the establishment of the Philadelphia Exchange. [Applause.]

All associations of a business character must have for their main object features of a monetary value to their members, whether they come in the shape of a saving of valuable time, the opportunity of gaining important business information, or special advantages in other forms, yet nevertheless when there can be com-

joined with these a public benefaction and a social acquaintance, such organizations become doubly valuable. When I look around me and see gentlemen from all parts of our country, who but a few years since were strangers to each other, win by means of the Exchanges have been brought into intimate business and often social relations, I feel that we have real cause to congratulate each other on the formation of this body of Exchanges.

It has been my pleasure to visit many cities in our beloved country, and before the establishment of these Exchanges I felt myself a stranger and alone, while now the first thing I do is to ask for the Builders' Exchange, and I find a host of friends to bid me welcome and help me to enjoy myself, and to assist me if I am there on business.

There have been occasions when my time was so limited in business that I kept as far away from social gatherings as possible, for I had learned from experience that their hospitality was so generous that time and business had to be given secondary consideration. Many here will still remember what occurred about two years ago in this city. Brother Watson and his son were about starting for Europe. Our dear old President, John J. Tucker, and good

Brother Marc Eidlitz invited us to take our parting dinner with them. To our surprise we found a regular reception inaugurated, and there were present not only members of the New York Exchange, but large delegations from Boston, Philadelphia and other sister Exchanges to bid us Godspeed on our voyage.

The following morning we found on our steamer lovely flowers and beautiful gifts. Among them this emblem of our native land (holding up a small American flag), [applause] with a request that we should carry it with us in our travels. Gentlemen, shall I tell you where it has been?

All over the Continent it was a means of recognition by our fellow-countrymen, and it always received a friendly greeting. I remember that in Paris, on July 4, 1889, we had it with us when, with many other Americans, we went to an humble and retired convent in the outskirts of that city to decorate the grave of Lafayette. [Applause.]

It was waved on top of the great Eiffel Tower, as also on top of the Rigi, and at the foot of Mount Blanc, on the summit of Mount Vesuvius and in the deserted streets of Pompeii; in Sicily at the base of Mount Etna. On entering the port of Valletta, in Malta, we noticed

the Stars and Stripes flying from the foretop of a vessel, and we waved our flag, which was greeted with a shout not only by the crew of that vessel, but by the jolly tars of a British man-of-war.

On our way to Alexandria the flag calmly reposed in our satchel, as we had other and more important business on hand—to wit: a grand tussle with old Father Neptune, in which we came out second best, but when we reached Cairo and ascended the Pyramids the flag again did duty, to inform the inhabitants of that far-off land of the presence of live Yankees. On the trip up the Nile this flag was saluted by the Union Jack of old England, the tri-colored ~~flag~~ of France, and other flags carried by the ~~Pharaohs~~ our steamer passed. In Nubia, at Wady Half, and at Rock Abooseer, 1000 miles up the Nile, the flag fluttered in the breeze; so also at Ismailia, on the Suez Canal, and at Port Said, through Palestine and at Damascus, in Greece and Russia, through Roumania, Servia and up the Danube.

While in the latter countries Mrs. Stevens found a new use for this flag. We had been subjected to much trouble by customs officials rummaging through our trunk, so she conceived the idea of spreading the flag on the top tray,

and it worked like a charm. A gruff and grum-looking officer would demand our keys, and on opening the lid we would see a pleasant smile come over his countenance, the lid was closed, the cabalistic chalk marks made, and our keys returned with a bow. We tried that same game on our arrival in New York, but it did not work worth a cent. [Laughter.]

I see at the table the gentleman who presented me with this flag, and I shall treasure it in kindly remembrance of him. So much, brethren, for the social relations as exemplified by our Sister Exchanges. Not only in our land but in England, I have been welcomed by the officers and members of the Builders' Associations, and received many valuable business and social attentions. This National Association has made the acquaintance of a number of the "Sister Exchanges;" they have been to Chicago, to Cincinnati, to Philadelphia, to St. Paul, and are now in New York.

Brethren of the National Association, how do you like us "Sister Exchanges"? But wait till you go to Cleveland, to St. Louis, and later on to Boston, then surely you will, in the language of the Queen of Sheba, when she visited King Solomon, say "The half has not been told us." [Applause.]

On Friday, February 13, over 600 members of the National Association of Builders and their friends assembled at the Building Trades' Club, No. 20 East Twenty-first Street, New York, and there received tickets for Philadelphia and return. A special train had been provided for the party which left Jersey City at 1.15 P. M., arriving in Philadelphia at 3.35 P. M. They had come to inspect local Exchange, the Exhibition Department and the Mechanical Trade School. A splendid luncheon was awaiting the hungry travelers at St. George's Hall, Thirteenth and Arch Streets. Luncheon over, the visitors went direct to the local Exchange, where President John J. Tucker, of the National Association, called the meeting to order, saying: In accordance with the resolutions passed at the last session, we are convened here to-day to examine the work done by one of our filial bodies. I will first ask your attention to a few words from Mr. George Watson, President of the Builders' Exchange of Philadelphia.

MR. WATSON: Gentlemen of the National Association of Builders, I welcome you to our home. We, belonging to the Philadelphia Exchange, feel very highly complimented that you should come from New York City here to-

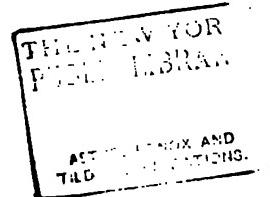
day, and we want you to look at our Exchange, to view its many appointments as a model. We are too modest ourselves to think that we are better than anybody else. We have only commenced in earnest, and have pushed the matter forward with that zeal which always brings success. We have done no more than any Exchange in the United States can do if it will put its shoulder to the wheel and act with zeal and earnestness. [Applause.] We have an exhibit of building material which I am proud to say, as a member of the Builders' Exchange of Philadelphia, is equal to any in the United States. We have a trade school of which you have heard me speak, but I am afraid when you see it you will be disappointed. We have commenced it in earnest, and hope in a few years it will grow as large as Colonel Auchmuty's in New York, and I hope as successful. Gentlemen, I want to say that the members of the Philadelphia Exchange feel highly honored by your visit to this city, and would like to have you make this your home while you are here. I won't detain you further, but will introduce Mr. Charles Gillingham, the chairman of the Reception Committee, who will give you some account of our organization and its work.

Mr. Gillingham reviewed, at considerable length, the progress of the Exchange, and did

it so well that it was unanimously agreed to publish his paper as a part of the proceedings of the National Convention.

At the conclusion of Mr. Gillingham's address Secretary Sayward was called to the chair and in accepting the post, Mr. Sayward said :

Returning from my long tour last fall I stopped for a few hours in the good city of Philadelphia, and while examining this Exchange building, with its splendid exhibit and trade school, it occurred to me with peculiar force that in no way could the National Association so well show to the delegates who would soon assemble in Convention what is possible in the way of a Builders' Exchange than by coming here to Philadelphia. I had been for five weeks visiting cities all the way from Syracuse, N. Y., as far west as Denver, Col., and among other things that I told the Exchanges in the cities visited was that they ought to have buildings of their own: that they ought to have Exchanges established upon a better principle than many of them seemed to comprehend. In many cases I had to tell them that their Exchanges or associations were really of little value, and that there was much for them to learn. I did the best I could to show them what an Exchange might be: what it might be in all its parts;





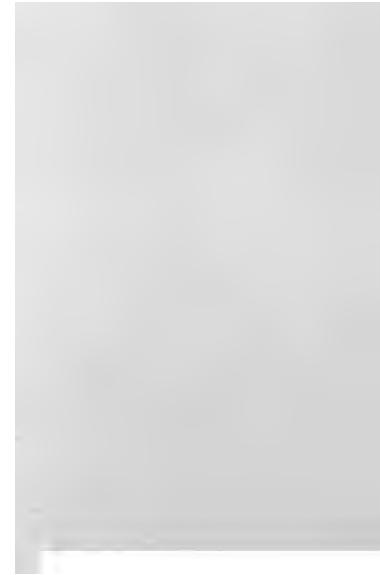
CHARLES GILLINGHAM,
THIRD VICE-PRESIDENT, 1892.

CHARLES GILLINGHAM.

Charles Gillingham, the present Third Vice-President of the Master Builders' Exchange, comes of the good old Friends' stock of that name, so well known in Philadelphia, where he first saw the light, August 18, 1849. His parents are Samuel and Hannah I. Gillingham, both of whom are members of the Society of Friends. Charles was educated in the Friends' Central School, at Fifteenth and Race streets, under Aaron B. Ivins. When his schooling was finished he was placed with Joseph H. Collins, to learn the lumber business. He afterwards entered the employ of Mahlon Fulton, and later he became a member of the firm of Mahlon Fulton & Co., manufacturers of wood work, who have been members of the Exchange since the early days of its organization. Mr. Gillingham has taken an active interest in everything pertaining to the Exchange and served on the first Board of Directors, of which body he is still a member.

Among the many good offices he has done for the Exchange, the one which receives the highest commendation is the organization of the Exhibition Department. He is chairman of the committee having that department in charge, and to him in a great measure is due the success attending the venture.

This department of the Exchange not only interests the building fraternity of the whole country, but is also visited every day by hosts of sightseers.



what it might do in every department if it were fully developed; but I knew well enough that no language I could use would make half the impression that a single visit of a few hours to a well-developed Exchange would make. So upon my return through New York the Executive Committee listened to my request, and voted to ask the Philadelphia Exchange to permit us to make this visit. I think all of you will say that it was a good thing to do. [Applause.] I think those of you who have been to-day for the first time inside a building owned by a Builders' Exchange will acknowledge that it is a good thing to possess. Those who have to-day for the first time seen a building exhibit (which I am very glad to say to modest President Watson is not only the equal of any building exhibit in this country, but is a better building exhibit than you will find upon the globe) will say that it is a good thing to have. And I think all of you who are here, whether you be those who are members of old-established Exchanges or of new ones, or of those who haven't come anywhere within sight of your desires, will say that here is a wonder—an Exchange which, chartered in February, 1887, presents to-day the magnificent result which you see before you.

I have urged everyone who could possibly come to be here in Philadelphia in order that you might tell the story to your own local organizations and get them to do something of this kind. We offer an example which is better than all the talk that can be given to you for the next twenty years. What is the matter with New York that she has not got something of this kind? New York, the biggest city in the country, with her great wealth, with her magnificent buildings, and with her wealth, shown not only in her financial exhibit, but in her wealth of heart, which is worth infinitely more. [Applause.] Now, then, what is the

~~matter with the builders in the great metropolis?~~ [A voice: "We are going to get there."] Yes, they have been promising me for years that they would get there, and I want this to be an incentive to them so that they WILL get there. I hope the time will come when they will have a property there worth \$1,000,000, as they well can. There is plenty of material there to do it with, and I hope it won't be long before it is done. What is the matter with Chicago? [A voice: "Nothing."] I know that they THINK there isn't anything the matter with her. But those of us who go there and look at her in comparison with other cities see

that there is plenty of room for improvement ; and one of the things that Chicago needs to improve in about as much as anything I know of is in the establishment of a Builders' Exchange, in a building of its own, that shall compare favorably with any other of the magnificent enterprises of that splendid city. I think that the Chicago people who have been here to-day will not let this seed fall fruitless on the ground. What is the matter with all these other cities that they do not do as Philadelphia has done ? We know well enough that some of these cities have taken up the scheme and are enlarging upon it, to the credit of the builders in those cities. Washington already has her six-story building up almost ready to roof, and her Builders' Exchange started less than three years ago. [Applause.] Many of you are representatives of bodies that have been in existence many years. Are you going to let your younger brothers outstrip you ? Start in with the ideas that you get here to-day, and let us see in every city of any reasonable size buildings owned by the builders and run for the purpose of getting the highest advantage out of them for the uplifting of the building fraternity.

You have been shown the financial side of this matter here to-day, and that is in itself en-

couraging. But that is by no means all. If organizations like this can be managed successfully from a financial point of view, the other things will come easier; more will be gained. And there is here, as you heard from Mr. Giltingham, more yet to be gained than what you have seen demonstrated thus far. This is the only Exchange which has so thoroughly followed out the many suggestions which have flowed from the central body, for it alone of all others has a trade school. Although Kansas City has a magnificent building—and that, too, is a young institution—built new from foundation to capstone, all within two or three years, it has not yet established its trade school. So that I can truly say that this Philadelphia Exchange, built by our teachers in the City of Brotherly Love, has developed more of the suggestions of the National Association than any other of the local bodies. We are looking now anxiously toward Baltimore, for I have been told during my conversation by the secretary of that Exchange that they have secured a piece of land of the value of about \$60,000, in a very fine location, where they propose to put up a valuable building. And in other cities the builders are looking around to see what they can do in the same direction. You will see here what has

been accomplished by this Association, and I trust it will be a stimulus to you all. It is only possible for us to spend a few hours here, but we shall have an opportunity of visiting the Trade-School Department and seeing the boys at work. There you will feel, I am sure, as much inspired as you were by your visit to Colonel Auchmuty's school ; and perhaps encouraged in another way, for here is an association of builders doing this work and not leaving it wholly to a philanthropist outside of the building profession. We want to bring out the philanthropists in our midst, and there are plenty of builders who will have money to give who could not give it half so advantageously to any other enterprise as toward an enterprise which helps to educate men and boys to know the trade more thoroughly, and which will be free from many of the dangers which surround the old system.

This is one of the lessons which you must take away from here, and while I am grateful to this Exchange for placing my picture upon the wall, I could almost say that I wish they had spent the money that they have put into that portrait to put another boy at work. I have no particular desire to hang upon the walls of history in any such fashion as this, but I

would like to be remembered by and by as one who has helped along the trade-school idea. [Applause.] There are a few whom I desire to call to this platform to tell you what they think of this Exchange Building, now that they have seen it. Some of them are men whom I have been talking to about this Exchange and this work for some time, and I think there is no better way for me to select than to take the various officers who have presided over this National Association during the five years of its existence; and I will first ask Mr. George C. Prussing, of Chicago, to come to this platform and tell us what he thinks about it.

MR. PRUSSING: Mr. President and gentlemen:—I am glad of the opportunity afforded me to voice my satisfaction at being able to see the best home for builders in the country. The last time I was in Philadelphia this lot had been secured with an old building upon it, the back of the lot being entirely bare. To-day I am pleased to acknowledge that it far surpasses all descriptions I had heard of what you had done. I did not come here prepared to make a speech. This is a meeting of the National Association. The Executive Committee has asked us to come and meet in Philadelphia, and I trust that I am expressing the satisfacti-- of

all the members of the Convention and the visitors in indorsing that action and thanking them for it. As an object lesson its value cannot be overestimated. Therefore, with your permission, I will move that the thanks of the National Association of Builders be extended to the Builders' Exchange of Philadelphia for their ready acceptance of the proposal of a visit to their Exchange, and for the hospitable manner in which they have received and entertained the delegates; also that the thanks of the National Association be given to the Builders' Exchange of Philadelphia for the demonstration they have given of what an Exchange can accomplish, which is a wonderful object lesson to all the filial bodies here represented.

SECRETARY SAYWARD: I will now call to the platform as the next speaker John S. Stevens, of Philadelphia.

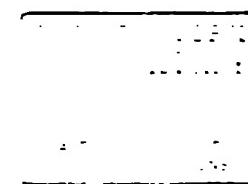
MR. STEVENS: Mr. President and gentlemen: —I have talked enough to you, I think, although not quite as much as Brother Sayward has. I can only reiterate the words of our President and the words of the chairman of our committee in their addresses, when they said that they gladly welcomed you here and were glad to have you look upon what has been accomplished by the members of this Exchange

during the short time that we have been in existence. A similar undertaking to this, gentlemen, means hard work for some of you, as some of us know. Work of this kind does not do itself. There needs to be, as we have had in this Exchange, men whose hearts are in the work and who are self-sacrificing enough to give their brain-work and the work of their hands and some of the money from their pockets to accomplish the good, not only for themselves, but for the brothers of the craft that are around them, whom they have learned to love and respect. All that I can say about this has been so well said by the gentlemen who have preceded me that I will not occupy your time. **But there is one remark** that the Secretary of the National Association made that I do wish to comment upon. He said that he would rather have the money that was spent for his picture expended for the education of another boy in our trade school. Brother Sayward, we haven't room for another. Our school is filled to overflowing, and it is already said that we may have to erect a building in another locality for our trade school. We started the schools as an experiment, and they have proved such a success that we have had applications in several of the departments that we could not accommodate.

But, gentlemen, that picture is there for another purpose and for another reason. It is there as an inspiration to the members of this Exchange, because to Brother Sayward and his efforts and the enthusiasm that he was able to give unto us are due these results, and we are teaching our boys to honor and revere him as much as we do. We intend that his name shall be a household word among them, and that they shall know he has had much to do with the work that has been accomplished and the good that may result from our efforts here. Now, I am sure you will excuse me and not ask me to say anything more on this occasion.

Mr. Sayward then called upon President Tucker to give his impressions of the Philadelphia Exchange.

PRESIDENT TUCKER: Gentlemen:—As I have been talking for a week past to most of you I shall not detain you with any long remarks. We, in New York, have had an Exchange for, perhaps, forty years, yet it has been one in name more than for any benefit that we might derive from it. For a number of years it has been my wish that we might see that Exchange rejuvenated, enlarged and made what I have thought an Exchange should be. I think our people are becoming educated to the fact that



still exist, and there stones fifteen feet square upon the edge and sixty feet long that have been elevated to the height of 150 feet still stand in their Oriental grandeur after many centuries have rolled away. I say to you builders that you represent the civilization of this country ; I say to you that you represent in art and in science and in the application of the same that which will endure, when the laws and the institutions of this country shall have passed away, for a thousand years. Your work reflects the beautiful, the æsthetic. The monuments which you rear to-day are monuments of immortality. [Applause.]

I have the honor of representing, as its president, the Board of Education of the City of New York. I beg to express the thought that the work of the public-school system in this country is not to teach so many square yards of grammar, so many cubic feet of arithmetic, the extraction of various kinds of roots, or so much of English literature. These are incidental matters, and are necessary as the implements to be used for the attainment of the higher end. We all know that the government of the people and by the people and for the people that shall not perish from the earth is the government that must be founded upon intelligence ; and since

this is so, these things are essential. But the true sphere of the public-school system through all of the States and Territories of this Union is so to educate our boys and girls that we can hand them back to the government, to the State, to society and say: "Take these that you have intrusted to us and weave them into this great American fabric of ours; take them as we have given them to you, the material for first-class American citizens." [Applause.] And when that is done we have builded monuments more enduring than brass.

There ought to be established all over this great country, and especially in the large cities, schools which, taking the child at four and a **half or five years of age**, will place it in the best kindergarten that the State can produce, under the best of kindergarten instructors, and keep it there until it is able to enter the primary department, and teach the child to see with its eyes, to hear with its ears and to work with its hands: and, as God has given it the capabilities, so to develop these that it may live in unison and harmony with nature round about it.

In the city of New York we have established twenty-nine manual training schools in connection with our department of public instruction, and they have had these for three years in our

city as a part of the system of public instruction. It is not the object of these schools to teach the boys trades. I do not wish you to confound the work of the manual training school with the work of a trade school. It has not that object in view, but it is to teach the boys and girls the elements which they can use when they go into active life. If they desire to become mechanics, if they desire to follow the profession of architecture or of kindred professions, it is to teach them to use the tools—woodwork in some of its branches, mechanical and technical drawing—to give them the tools which they can use if they desire to pursue a trade or calling. But we do not pretend that these things shall take the place of trade schools, and they do not. We aim to develop the faculties which God has given our children, so that when they leave the public schools they will have a sure and a lasting foundation upon which to build.

Nothing in the history of public education in this country has achieved such wonderful results as have been derived from these manual training schools during the three or four years in which they have been in existence. In the very poorest ward of New York we have clothed with beauty, I may say, the elementary instruc-

tion of our pupils, so that that which was before a wearisome task has become to them a thing of pleasure, and we intend to do all that we can to foster this plan.

Gentlemen, I am heartily in sympathy with this movement. I would not be with you to-day if I did not believe that the great middle classes of our country were the bone and the sinew of this nation. I believe that the prosperity of this nation depends upon the middle class to which we all belong. We know that there are the poverty-stricken ones whom God has not blessed with wealth, we know that they will go on forever sweeping the streets and grinding **day by day the bread of poverty.** Then there is the aristocracy of wealth, people who are born with golden spoons in their mouths, who roll along in their magnificent equipages with gilded exteriors, people who depend upon their wealth, and that alone, cradled in luxury —these people are the extremes in a great country like ours. But there is the salt of the earth, the bone and the sinew of society, by which this government is run to-day and by which it is maintained, and for which it exists partly and largely, namely, the great middle classes, represented by the mechanics and the tradesmen here assembled. It is these people

that preserved America in her days of darkness. They are the salt of the earth, and therefore we are to be by them salted and preserved. It is these people that constitute the class to which you and I belong; and I say that as between the two extremes we ought to be happy because we are members of that class.

Mr. President and gentlemen, I thank you for your courtesy and attention.

SECRETARY SAYWARD: You see, my friends, that the course we take is approved by those who look upon us from the outside. Although we have but a few moments left, I cannot refrain from calling upon one other gentleman. I will now introduce to you Mr. George Debevoise, of New York, the superintendent of the school buildings of that city.

MR. DEBEVOISE: The exhibits made here must naturally appeal to me as a mechanic, having gone through the various steps of apprentice, journeyman, subforeman, foreman and employer, and I can see every reason why a similar institution in New York City should be productive of the very best results. I should like to have occasion to visit it myself oftentimes, because from the nature of my work I require condensed information, and certainly an exhibit like this gives that opportunity for compact

information. In order to show you some of the results of our school system in New York, I would state that we have 185 separate school buildings, and that there are now thirteen new buildings in course of construction, averaging \$200,000 each; that the side-wall plastering alone in the school buildings of the City of New York amounts to 2,063,000 square yards. The president of our board has stated to you some facts in regard to the manual training pursued in New York City; but, going into the details which he did not give you, I will say that we have in the boys' manual training schools carpenter benches fitted up with complete kits of tools, so that a boy can get the handling of the tools to a certainty, so far as the limit of our manual training schools will permit: but he also learns practice in the handling of tools and in the management of material which fits him in a way when he leaves the school to go to the trade school and still further fit himself as a mechanician; and one great result is to develop any latent mechanical ability that there may be in the boy, and that latent ability must of necessity be developed before he makes a choice of his position in life. That position in life I know in a large number of instances is already assured—the boys will be mechanics. And me-

chanics' wives are also furnished, as well as wives for others, through these manual training schools. The girls in the public schools of New York are taught to cook, and they can now bake a biscuit that you can eat without danger of breaking your teeth, and they are taught to cook rice and to prepare a good cup of coffee, and the result now is that the teachers depend to a large extent upon the product of these manual training-school kitchens, thereby giving evidence of a most careful teaching, because teachers are somewhat critical as a rule. Gentlemen, I thank you for this opportunity to say a few words upon this subject. [Applause.]

PRESIDENT TUCKER: In closing these exercises, I feel that I must say on behalf of the gentlemen from abroad who have come here, that I only voice the sentiment felt and desired to be expressed by each of you, I know, that we are in duty bound to return our most heartfelt thanks to the Philadelphia Exchange for this visit and for the inspiration that I believe we will all receive and carry home with us.

After inspecting the home of the Philadelphia Exchange the party made its way to the Broad Street Station, and left on a special train at 9 o'clock, reaching New York about 11.30 P. M.

On March 24 it was decided to enlarge the Exchange by adding another story, to be used as a restaurant.

The closing exercises of the first term of the Mechanical Trade School were held at the Exchange on June 16.

The second term began on September 1 under most favorable auspices. Over 125 applications for admittance were registered, and in several classes it was found impossible to accommodate all who desired to join.

At the meeting held on September 22 Murrell Dobbins moved that Colonel Richard T. Auchmuty be elected to honorary membership in the Exchange, and Franklin M. Harris suggested the name of Dr. Edward H. Williams for like honors. Both motions were passed unanimously.

Delegates and alternates to the Sixth Annual Convention of the National Association of Builders were elected on November 24 as follows: Delegates—George Watson, Franklin M. Harris, William B. Irvine, Murrell Dobbins, John S. Stevens and William Harkness. Alternates—Charles Gillingham, William B. Carlile, Charles G. Wetter, William H. Albertson, Samuel Hart and David A. Woelpper.

In Memoriam.

1891.

JOSEPH HOLDZKOM,

March 30th.

MAHLON FULTON,

June 26th.

JOHN J. WEAVER,

July 14th.

WILLIAM J. PEOPLES,

July 18th.

WILLIAM GRAY,

July 31st.

THOMAS LITTLE,

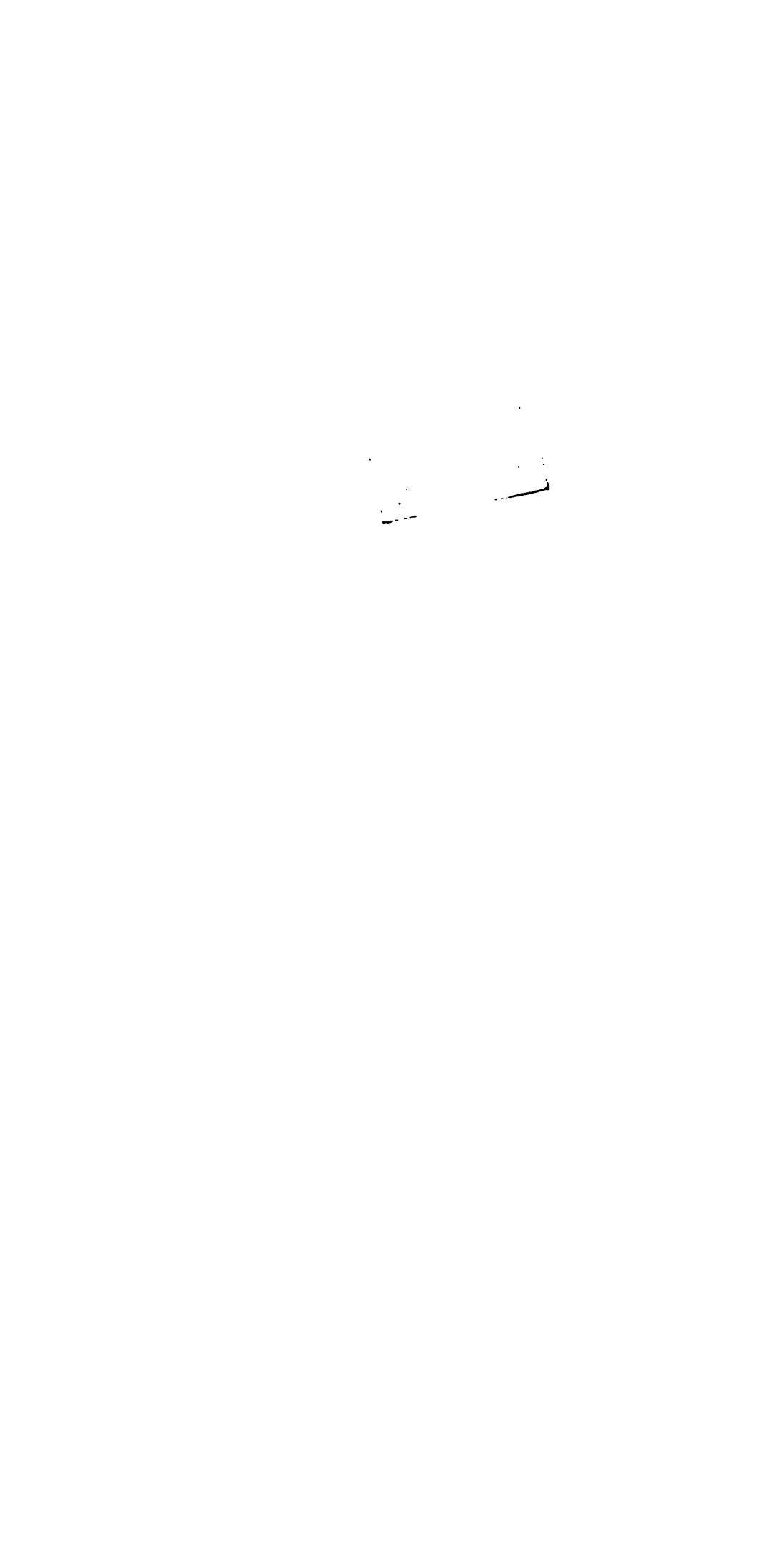
September 3d.

JOSHUA L. CHILDS,

October 29th.

HENRY R. COULOMB,

December 9th.



VII.

With the best-appointed building of the kind in the country, an interesting and profitable display of building materials and devices in the Exhibition Department, a splendidly equipped restaurant and a successful school of mechanical trades under its direct management, the Master Builders' Exchange of Philadelphia entered upon its seventh year, acknowledged the model Builders' Exchange of the United States.

The valuable property of the organization fronts on the west side of Seventh street, midway between Market and Chestnut streets, directly opposite the Franklin Institute and in the very heart of the business section of the city. It is within ten minutes' walk of the principal railroad stations and ferries; five minutes of the Bourse site, Clearing House, Stock Exchange, leading newspaper offices, Custom House, Post Office, United States Mint and City Hall, thus being most admirably located.

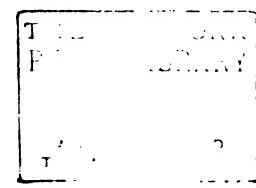
The lot has a frontage of seventy-five feet on Seventh street and a depth of 105 feet. The original building has been practically reconstructed. A new substantial five-story fire-proof office building occupies the rear portion of the

premises. It is fitted up in the finest mechanical and architectural style with all modern improvements, including hydraulic elevator, steam-heating and electrical-lighting, and with special attention given to light, ventilation and sanitary appliances. The front building, while not entirely demolished, was completely remodeled to adapt it to its present purposes.

About one-third of the basement is occupied by steam boilers, pumps and elevator machinery, and the remainder as a Mechanical Trade School. The first floor of the entire building is devoted to a Permanent Exhibition of Building Materials and Devices.

The Exchange Room is on the second floor of the front building. The second, third and fourth floors of the rear building are sub-divided into business offices, and the fifth floor is used for storage purposes and water tanks.

Alterations have been made in the Exhibition Room on the first floor whereby about 300 square feet of space available for exhibits have been added. This was demanded to accommodate the rapid growth of the Exhibition. An additional story has been placed on the front portion of the building, in which there is a first-class Restaurant for the accommodation of members of the Exchange, tenants in the build-





EXCHANGE ROOM, 1892.

ing, visitors to the Exhibition, and the public generally.

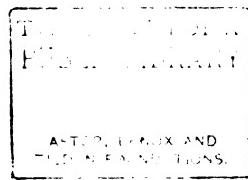
The offices—twenty-seven in number—are located in the rear on the second, third, and fourth floors of the building, entrance to them being through the Exhibition Room on the first floor. Two of these offices are occupied by the Lumbermen's Exchange, two by the Composition Roofers' Exchange, and all the others by leading business firms, either engaged directly in building or in furnishing materials for builders' use.

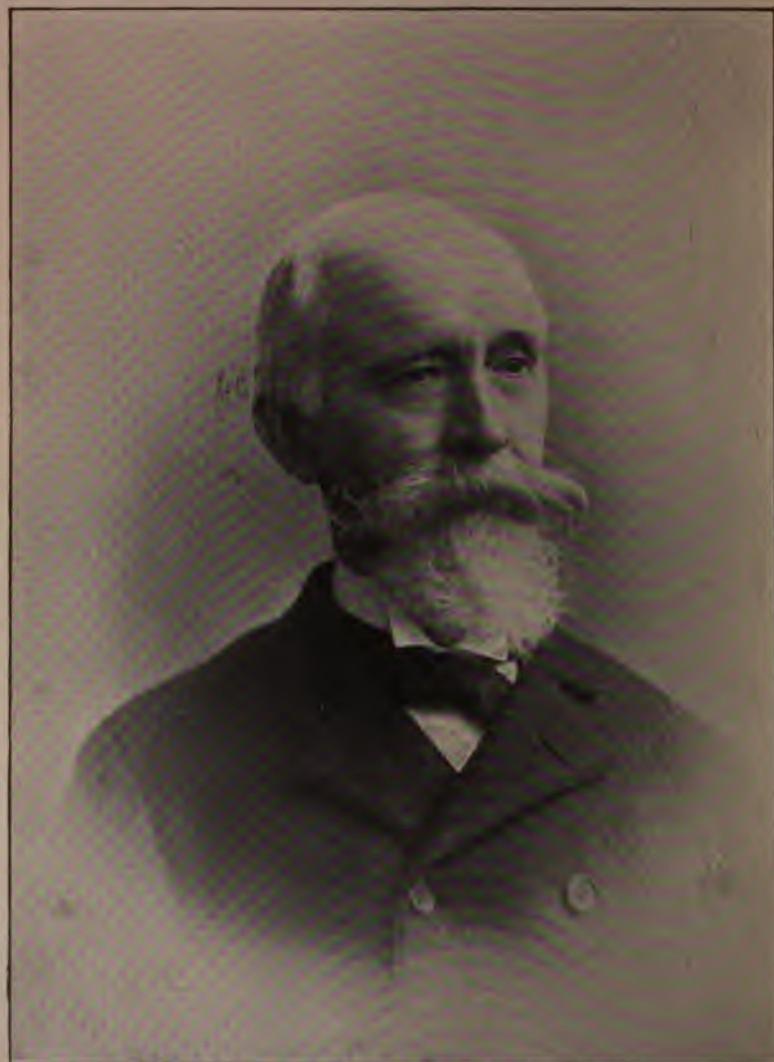
In the Exchange Room, which occupies the entire second floor front, the members of the Exchange congregate daily during 'Change hour, from 12.30 to 1.30 P. M., for informal conference. The stated monthly and other formal business meetings of the organization are also held here. It is handsomely fitted up and is in every way admirably adapted to its purposes. All the literature of the day in any way relating to the building trades, as well as the leading daily newspapers published in the United States, humorous publications and popular magazines, are on file for the use of members.

The meetings of the Stone-Cutters' Association, the Bricklayers' Company, the Master Carpenters and Builders' Company, the Master

sters' Association, the Master Plumbers' Association, the Philadelphia Saw and Planing-Mill Association, the Master Painters' Association and the Metal Roofers' Association are also held in the building, thereby practically making it a headquarters for all the building trades.

The membership roll includes the name of nearly every reputable builder and manufacturer or dealer in building materials in Philadelphia. These employ thousands and thousands of artisans and laborers. The buildings erected by them from year to year cost over \$30,000,000, and to their energy and enterprise Philadelphia owes its name—The City of Homes. Nearly 400 individuals, firms and corporations have become members of the Master Builders' Exchange since its organization, as the following roster will show:





JACOB JANNEY,
SUPERINTENDENT OF EXCHANGE.

ROSTER
OF THE
MASTER BUILDERS' EXCHANGE
OF PHILADELPHIA.

NAME.	ADMITTED.
* Abel, Charles	November 15, 1887
Adams, Daniel	May 9, 1890
Adams, William & Co.	June 8, 1887
Ajax Lead Coating Company, The	May 8, 1890
*† Albertson, William H.	February 16, 1887
Aldham Stone Quarry Company	April 20, 1889
*† Allen, James T. & Son	February 16, 1887
* Albright, J. S.	January 17, 1888
Allam, J. S.	September 1, 1891
*† Allen, Clifford P.	February 16, 1887
Allen, J. Rex	June 1, 1887
† Aman & Brother	February 16, 1887
* Amweg, Frederick J.	January 27, 1891
* Anderson, John M.	January 19, 1889
*† Andress, Michael B.	February 16, 1887
Armstrong, David	March 12, 1889
Armstrong, William	January 17, 1888
Asphalt Block Company	March 12, 1889
* Atkinson, Henry T.	February 13, 1892
*† Atkinson & Myhlertz	February 16, 1887
*† Atkinson, John C.	February 16, 1887
*† Atkinson, John	February 16, 1887
*† Austin, Obdyke & Co.	February 16, 1887
Bailey, J. F.	December 6, 1887
* Baird, John & Sons	March 3, 1891
*† Bancroft, Robert F. & Son	February 16, 1887
* Barber, Allen B.	January 27, 1890

* Corporate members. † Charter members.

* Ballinger, Richard C. & Co.	April 26, 1887
* Ballinger, Fenwick A.	April 1, 1890
* Benton, Charles.	June 1, 1887
Belmont Iron Works	January 27, 1890
Beatty, James, Jr. & Co.	October 4, 1887
Bird, Joseph	May 8, 1890
*† Black, Francis A. & Son	February 16, 1887
Bond, James	May 16, 1888
*† Boyd, Hugh & Son	February 16, 1887
* Boorse, David O.	September 24, 1889
Bowen's Sons, S.	December 20, 1889
Borgner & O'Brien	June 15, 1887
* Borgner, Cyrus.	November 3, 1891
Bortel, Edward S. & Co.	September 7, 1887
Boston Terra-Cotta Co.	July 5, 1892
*† Brown, George B.	February 16, 1887
Bradin, James A.	April 26, 1887
* Bradley, Walter T.	June 4, 1887
*† Brown, Joseph E.	February 16, 1887
Brownback, O. D. & Co.	August 2, 1887
Brewer Brothers	April 5, 1892
*† Buvinger, Adolphus G.	February 16, 1887
Budd & Co.	May 16, 1888
Burkhardt's Sons, George J.	May 21, 1889
Buckwalter Stove Company	June 3, 1890
*† Byrd, John	February 16, 1887
*† Carrigan, Peter & Son	February 16, 1887
*† Campbell, John	February 16, 1887
* Campbell & Atkinson	January 20, 1888
*† Carlile & Joy	February 16, 1887
*† Carman, Charles C.	February 16, 1887
Calvert, P. B. & Co.	June 1, 1887
Cavanagh, Nicholas	June 4, 1887
* Catanach, A. A.	June 15, 1887
Central Plaster-Board Company	May 3, 1892
Central Lumber Company	November 3, 1891
*† Chapman, Joseph & Co.	February 16, 1887

* Corporate members. † Charter members.

*† Chapman, William R.	February 16, 1887
* Childs, Joshua L.	January 27, 1891
Clarke, Harry J.	January 23, 1893
*† Copeland, Hugh & Son	February 16, 1887
* Cox, Charles A. & Son	May 16, 1888
Commercial Wood and Cement Company	January 19, 1889
Copeland, Asa	January 27, 1890
Cornell, Hugh T.	April 27, 1889
* Colgan, Peter T. & Son	November 5, 1889
*† Coulomb, Henry R.	February 16, 1887
Cox, Abram, Stove Company	January 27, 1890
*† Cooper, Joseph B.	February 16, 1887
*† Conway, Dennis & Sons	February 16, 1887
Collins, Joseph H. & Son	June 22, 1887
Coulter & Long	April 12, 1888
* Conway, William	June 1, 1887
Consumers' Marble Company	June 4, 1887
*† Creswell, Samuel J.	February 16, 1887
Creswell, Samuel J., Iron Works, The	May 8, 1890
*† Creswell, David D.	February 16, 1887
*† Cubberly, Edward	February 16, 1887
Darby, Edward & Son	June 1, 1887
Deacon, Howard R.	January 17, 1888
Decker, John & Son	January 29, 1889
Delaney, Edward	June 4, 1887
*† Devitt, William & Son	February 16, 1887
* Dietrich, Louis	June 4, 1887
Dingee, James E.	September 27, 1887
Dixon, Henry P. & Co.	January 1, 1888
*† Dobbins, Murrell	February 16, 1887
Donaldson, William J. & Co.	July 5, 1892
*† Dougherty, William R.	February 16, 1887
*† Doan, Thomas H.	February 16, 1887
* Dotterer, Amos & Son	February 28, 1888
* Dorsey & Smith	April 26, 1887
Doyle, William H.	June 15, 1887
Du Ross & Welsh	July 19, 1887

* Corporate members. † Charter members.

* Ballinger, Richard C. & Co.	April 26, 1887
* Ballinger, Fenwick A.	April 1, 1890
* Benton, Charles.	June 1, 1887
Belmont Iron Works	January 27, 1890
Beatty, James, Jr. & Co.	October 4, 1887
Bird, Joseph	May 8, 1890
*† Black, Francis A. & Son	February 16, 1887
Bond, James	May 16, 1888
*† Boyd, Hugh & Son	February 16, 1887
* Boorse, David O.	September 24, 1889
Bowen's Sons, S.	December 20, 1889
Borgner & O'Brien	June 15, 1887
* Borgner Cyrus	November 3, 1891
Bortel, Edward S. & Co.	September 7, 1887
Boston Terra-Cotta Co.	July 5, 1892
*† Brown, George B.	February 16, 1887
Bradlin, James A.	April 26, 1887
* Bradley, Walter T.	June 4, 1887
*† Brown, Joseph E.	February 16, 1887
Brownback, O. D. & Co.	August 2, 1887
Brewer Brothers	April 5, 1892
*† Buvinger, Adolphus G.	February 16, 1887
Budd & Co.	May 16, 1888
Burkhardt's Sons, George J.	May 21, 1889
Buckwalter Stove Company	June 3, 1890
*† Byrd, John	February 16, 1887
*† Carrigan, Peter & Son	February 16, 1887
*† Campbell, John	February 16, 1887
* Campbell & Atkinson	January 20, 1888
*† Carlile & Joy	February 16, 1887
*† Carman, Charles C.	February 16, 1887
Calvert, P. B. & Co.	June 1, 1887
Cavanagh, Nicholas	June 4, 1887
* Catanach, A. A.	June 15, 1887
Central Plaster-Board Company	May 3, 1892
Central Lumber Company	November 3, 1891
*† Chapman, Joseph & Co.	February 16, 1887

* Corporate members. † Charter members.

*† Chapman, William R.	February 16, 1887
* Childs, Joshua L.	January 27, 1891
Clarke, Harry J.	January 23, 1893
*† Copeland, Hugh & Son	February 16, 1887
* Cox, Charles A. & Son	May 16, 1888
Commercial Wood and Cement Company	January 19, 1889
Copeland, Asa	January 27, 1890
Cornell, Hugh T.	April 27, 1889
* Colgan, Peter T. & Son	November 5, 1889
*† Coulomb, Henry R.	February 16, 1887
Cox, Abram, Stove Company	January 27, 1890
*† Cooper, Joseph B.	February 16, 1887
*† Conway, Dennis & Sons	February 16, 1887
Collins, Joseph H. & Son	June 22, 1887
Coulter & Long	April 12, 1888
* Conway, William	June 1, 1887
Consumers' Marble Company	June 4, 1887
*† Creswell, Samuel J.	February 16, 1887
Creswell, Samuel J., Iron Works, The	May 8, 1890
*† Creswell, David D.	February 16, 1887
*† Cubberly, Edward	February 16, 1887
Darby, Edward & Son	June 1, 1887
Deacon, Howard R.	January 17, 1888
Decker, John & Son	January 29, 1889
Delaney, Edward	June 4, 1887
*† Devitt, William & Son	February 16, 1887
* Dietrich, Louis	June 4, 1887
Dingee, James E.	September 27, 1887
Dixon, Henry P. & Co.	January 1, 1888
*† Dobbins, Murrell	February 16, 1887
Donaldson, William J. & Co.	July 5, 1892
*† Dougherty, William R.	February 16, 1887
*† Doan, Thomas H.	February 16, 1887
* Dotterer, Amos & Son	February 28, 1888
* Dorsey & Smith	April 26, 1887
Doyle, William H.	June 15, 1887
Du Ross & Welsh	July 19, 1887

* Corporate members. † Charter members.

Duerr, H. O. & Co.	October 17, 1892
Ebert, Morris	April 26, 1887
* Einwechter & Sons	April 12, 1888
Emack, John D.	January 27, 1891
Equitable Brick Works, Limited	July 26, 1887
Essick, Lewis	February 16, 1887
Este, Charles	August 2, 1887
* Essick, Paul J. & Sons	January 27, 1891
Excelsior Brick and Stone Company	July 26, 1887
*† Evanson, John E. & Son	February 16, 1887
Fairlamb, P. H. & Co.	January 26, 1892
† Filbert, Ludwig S.	February 16, 1887
Field, Charles J.	July 26, 1887
* Flood, Thomas H.	February 14, 1888
* Flood, Edward H.	March 26, 1888
*† Fogg, William P.	February 16, 1887
Ford & Kendig Company	July 9, 1889
Frankford Woodworking Company	April 1, 1890
*† French, Samuel H. & Co.	February 16, 1887
Fritzinger, John W.	January 26, 1892
† Fulton, Mahlon & Co.	February 16, 1887
Gallager, W. C.	June 1, 1887
* Gara, McGinley & Co.	January 27, 1891
† Garber, Jacob R.	February 16, 1887
† Garrett & Dix	February 16, 1887
Gause, H. Victor	August 6, 1889
Gaskill, J. W. & Sons	November 15, 1887
Gassner, Thomas, Jr.	May 3, 1892
*† Gear, Washington J. & Son	February 16, 1887
Gibbon, R. Q.	June 15, 1887
*† Gillespie, J. & T.	February 16, 1887
Gillison, Christie & Lockerbie	June 3, 1890
Gill, John N.	January 26, 1892
Gillingham, Frank C.	February 4, 1889
Glenn, J. Temple	November 25, 1889
*† Gray, William & Sons	February 16, 1887
Griffin Enamelled Brick Company	June 3, 1890

* Corporate members. † Charter members.

Greer, B. W. & Hetzel	October 4, 1887
Grosscup, Daniel L. & Son	April 20, 1889
Gummey, Spering & Co.	June 4, 1887
*† Harkness & Brother	February 16, 1887
*† Harris, Franklin M. & Co.	February 16, 1887
*† Hart, Samuel & Son	February 16, 1887
* Hastings & Morrison	February 14, 1888
Hall Brothers & Wood	January 26, 1892
Harrison, Joseph S.	January 19, 1889
Harvey, B. & Son	August 6, 1889
Haibach, Philip	September 24, 1889
Hall & Carpenter	June 1, 1887
Harrison, William H. & Brother	June 1, 1887
Harbert, Russell & Co.	July 5, 1887
Harrison Brothers & Co.	November 15, 1887
* Hall & Garrison	January 27, 1890
* Hancock, Joseph B.	January 27, 1890
Harlan & Hollingsworth Company, The	October 6, 1891
Heroy & Company	June 4, 1887
Heulings, William H.	June 22, 1887
*† Hinman, Charles C.	February 16, 1887
Hires & Co.	July 9, 1889
Hitzeroth, C.	June 4, 1887
Hixon, Anderson	February 2, 1892
Howe, D. M.	September 7, 1887
Howard, James W. & Sons	June 1, 1887
*† Hollis, Edward A.	February 16, 1887
Howard Foundry and Machine Works	April 5, 1892
Horr, Robert C. & Co.	March 12, 1889
Hoopes & Townsend	May 21, 1889
Holdzkom, Joseph	March 9, 1887
Hudson & Dillin	March 3, 1891
Hummelstown Brown-Stone Company	July 24, 1888
* Huhn, Samuel	June 15, 1887
*† Huneker & Son	February 16, 1887
*† Irvine & Carty	February 16, 1887
Jarden Brick Company	June 4, 1887

* Corporate members. † Charter members.

Jenkins, Warner H.	December 31, 1888
Jordan, Jacob R.	June 26, 1888
* Johnston, James	March 12, 1889
Johns, H. W. Manufacturing Company	June 3, 1890
+ Kemp & Garrison	February 16, 1887
Kerbaugh, Joseph F. & Son	October 31, 1888
Kenderline, I. W. & F.	June 1, 1887
Keystone Plaster Company	March 12, 1889
* Kee, William & Son	April 26, 1887
Keystone Marble Company	January 3, 1888
Kenderdine, Warner J.	December 6, 1887
Kelly, John C.	June 4, 1887
Keenan, Edward	June 4, 1887
- Kirkpatrick Brothers	June 4, 1887
+ King, Miles	February 16, 1887
+ Kister & Orem	February 16, 1887
- Kisterbock, John & Son	December 31, 1888
Kolb, John	June 4, 1887
Kramer, Francis D. & Co.	June 1, 1887
Krouse, Godfrey & Co.	September 27, 1887
Lawrence Cement Company	June 15, 1887
Larkin, Bernard	September 24, 1889
Leiper & Lewis	July 24, 1888
Lesley & Trinkle	April 26, 1887
+ Little, Thomas & Son	February 16, 1887
Liechhardt & McDowell Stove Company, The	July 9, 1889
- Linton & Fowler	April 26, 1887
Lloyd, William M. Company, Limited	June 1, 1887
Long, James N.	May 5, 1891
Lorillard Brick Works Company	August 3, 1892
Lucas, John & Co.	June 4, 1887
Lukens, Jesse & Brothers	June 15, 1887
Lutz, John M.	April 26, 1887
+ Marshall, Thomas H.	February 16, 1887
+ Magee, Michael & Co.	February 16, 1887
+ Mann, James & Brother	February 16, 1887
Maule, S. G. Morton	February 26, 1888

* Corporate members. † Charter'd

Maurer, Henry & Son	March 1, 1892
Maurer, Rudolph	August 4, 1891
Mattson, F. H. & Co.	January 17, 1888
Macan & Co.	April 15, 1890
* Maxwell's Sons, John	April 26, 1887
McAvoy, Frank	November 27, 1888
* McAvoy, Thomas B.	June 4, 1887
McAdoo, William	June 4, 1887
McBride, William J.	November 25, 1889
*† McCarter, William	February 16, 1887
*† McCaul, Charles	February 16, 1887
*† McCarron, Michael	February 16, 1887
McCay, John J.	January 27, 1890
McCandless, William J.	March 26, 1888
McClenahan & Brother	December 13, 1888
* McCartney & Oler	June 1, 1887
* McCoach, William	June 15, 1887
McCarty, Charles	August 2, 1887
* McCarty, Thomas	November 25, 1889
McDowell, John	December 13, 1888
McDuffee, John I.	March 4, 1890
McGookin, D. H. & Co.	June 1, 1887
McHenry, A. R. & Co.	October 31, 1888
* McInnis, H.	June 12, 1888
McIlvain, J. Gibson & Co.	January 17, 1888
*† McPherson, William C. & Sons	February 16, 1887
McShane, Michael	June 1, 1887
*† Mentzinger, William W.	February 16, 1887
Merchant & Co	June 4, 1887
* Melody, Michael	March 12, 1889
Meyer, Sniffen Company, Limited, The	January 23, 1893
Middleton, Howard W.	August 3, 1892
Miller, Charles W.	September 2, 1890
Miller, Hiram A.	February 14, 1888
Miller, J. S. & Brother	May 1, 1888
* Miller, John W.	June 4, 1887
Moorman, James & Son	February 28, 1888

* Corporate members. † Charter members.

Morr, Stephen & Son	April 26, 1887
* Morse, Williams & Co.	June 1, 1887
Moulder, C. S.	November 15, 1887
Murray, M. A.	April 1, 1890
*† Myers, Jacob	February 16, 1887
Nesbit, Charles P.	June 4, 1887
New York Architectural Terra Cotta Company . .	June 3, 1891
*† Nice, William, Jr.	February 16, 1887
Nice, Eugene E.	March 4, 1890
Nichols, Frank A.	April 7, 1891
* Obdyke, W. Austin & Co.	January 27, 1891
* O'Brien, John T. & Sons	April 26, 1887
*† O'Donnell, John	February 16, 1887
Onderdonk Heating and Ventilating Company . .	June 4, 1887
Orton, Benjamin F.	July 9, 1889
Otis Brothers & Co.	October 4, 1887
Overturf, Albert	December 20, 1889
*† Payne, George F. & Co.	February 16, 1887
Pancoast, D. & Co.	February 8, 1889
Parker, Thomas	February 8, 1889
Pardee, C., Works	June 2, 1891
Patterson, Robert & Son	January 27, 1890
Pancoast & Maule	May 16, 1888
Peerless Brick Company	February 16, 1887
Pennsylvania Machine Company	March 3, 1891
*† Pennock, J. E. & A. L.	February 16, 1887
Perth Amboy Terra Cotta Company	June 1, 1887
Pettit, David & Co.	June 15, 1887
Peoples Brothers	June 22, 1887
Philadelphia Granite and Blue-Stone Company .	April 26, 1887
Philadelphia Metal Cornice Works	March 6, 1889
Phoenix Iron Company, The	April 5, 1889
Phila. and Conshohocken Stone Quarry Company,	May 21, 1889
Porter, James	July 24, 1888
Pottsville Iron and Steel Company	April 5, 1892
Prettyman, Charles B.	April 5, 1892
Prendaville, Edward W.	January 27, 1890

* Corporate members. † Charter members.

*† Prince, John F.	February 16, 1887
* Quigley, James J.	April 27, 1889
Raff & Maxwell	April 20, 1889
Reinhalter, P. & Co.	March 4, 1890
*† Reeves, J. W. & C. H.	February 16, 1887
*† Reeves, Stacy & Sons	February 16, 1887
Reeves & West	March 4, 1890
† Read, Franklin J.	February 16, 1887
*† Remick, Enoch	February 16, 1887
Reading Iron Works	June 26, 1888
* Read, William N.	June 1, 1887
* Rea & Riley	June 8, 1887
Reynolds, J. & Son	April 26, 1887
Rimby, A.	June 1, 1887
Riley, Samuel R.	January 27, 1891
*† Ridgway, B. & Son	February 16, 1887
Roberts, A. and P. & Co.	April 5, 1892
Roeske, Henry	June 12, 1888
* Rorke, Allen B.	December 2, 1890
*† Roydhouse, George W.	February 16, 1887
*† Royer Brothers	February 16, 1887
Rutter & Merritt	May 21, 1889
* Ruff, John G.	June 8, 1887
*† Savery, John C.	February 16, 1887
Scholl, Joseph	April 27, 1889
Schleicher, Schumm & Co.	January 3, 1888
Schnumann & Lynch	November 2, 1887
*† Shannon, J. B. & Sons	February 16, 1887
Sharer, Geo. W.	November 25, 1889
Shaw, George W.	November 25, 1889
* Sharpless & Watts	June 4, 1887
Shafto, T. Milton & Co.	June 1, 1887
† Shedwick, William J.	February 16, 1887
Sheldrake, Charles M.	June 7, 1892
Shoemaker, Benjamin H.	January 3, 1888
Sheppard, Isaac A. & Co.	November 5, 1889
Siner, Charles B.	January 26, 1892

* Corporate members. † Charter members.

Sipps, George L.	April 5, 1892
* Slack & Brother	February 14, 1888
Smith & Russell	September 7, 1887
Smith, H. B. Machine Company	December 20, 1889
Smith, Henry J.	June 4, 1887
* Smith, William	February 16, 1887
Snyder, Lewis & Son	January 19, 1889
Stewart, William	January 26, 1892
* Steam Engineering Company	January 26, 1892
* Steele, William & Son	June 4, 1887
Stephens, Cooper & Godley	June 15, 1887
Stephens, Armstrong & Conkling	June 15, 1887
Stokes Brothers	July 19, 1887
Stokes and Parrish Machine Company	August 2, 1887
*† Stevens, John S. & Sons	February 16, 1887
*† Stewart, Charles	February 16, 1887
*† Steinmetz & Boorse	February 16, 1887
* Stewart, George W.	April 5, 1892
* Sweeney, Frank & Co.	January 26, 1892
Sunderland, John	April 15, 1890
*† Taylor, James C.	February 16, 1887
*† Taylor, Henry	February 16, 1887
Tacony Iron and Metal Company	January 27, 1891
Taylor, N. & G. Company	January 3, 1888
Tatham Brothers	November 25, 1889
*† Thorn, J. Stein	February 16, 1887
Thomas, Roberts, Stevenson & Co.	July 9, 1889
Thomson, William	March 12, 1889
The Old Lehigh Slate Company	November 27, 1888
Thomas, E. H.	June 4, 1887
Tomlinson, Charles P.	September 2, 1890
*† Turner, James	February 16, 1887
Tyson, Jacob L.	January 27, 1891
*† Vrooman, Samuel B.	February 16, 1887
*† Watson, George & Son	February 16, 1887
*† Watson & Peale	February 16, 1887
Ware, David	April 5, 1892

* Corporate members. † Charter members.

Watson & Gillingham	June 1, 1887
Warren-Ehret Company	June 1, 1887
Walton, George W. & Co.	January 19, 1888
Wallace, Samuel A.	February 14, 1888
*† Weaver & Pennock	February 16, 1887
West Philadelphia Brick Company	July 1, 1890
* Webster, Edmund & Nephew	June 1, 1887
Wendell & Smith	June 4, 1887
White, George W.	April 29, 1889
White, William J.	June 3, 1891
Whitehouse, Thomas H.	June 1, 1887
* Whiteside, Rush J. & Sons	June 4, 1887
*† Wilt, A. & Sons	February 16, 1887
*† Williams, Arthur H. & Sons	February 16, 1887
*† Wilson, J. Sims	February 16, 1887
*† Williamson, Frank	February 16, 1887
† Wilkins, William T.	February 16, 1887
* Wiggins, John R.	May 16, 1888
* Wilson, J. S. & Son	May 5, 1891
Willard & Torpin	April 5, 1892
Witner, D. L. & Brother	January 27, 1890
Williams, Thomas, Jr. & Co.	June 1, 1887
Willard, Edward M.	July 5, 1887
*† Woelpper, David A. & Co.	February 16, 1887
Woodhouse, Samuel F.	July 1, 1890
* Worthington, Leslie G.	April 26, 1887
Wood, James P. & Co.	April 26, 1887
Wood, James P. Heating Company, The	March 3, 1891
* Wood, Robert	June 15, 1887
Wright, William M.	December 6, 1887
Yarnall, H. E. & D. G.	March 26, 1888
Yeager, Frederick V.	June 1, 1887
Young & Milnamow	October 4, 1887

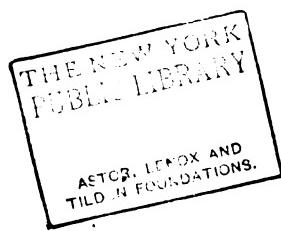
* Corporate members. † Charter members.

PERMANENT EXHIBITION.

The growing tendency of the times to combine the ornamental and artistic with the practical and substantial in American house building has taxed the ingenuity of the architect and the mechanic to the utmost in the conception and handling of the materials. The constant and bear evidence of an increase of capital which shows the general wealth of the people of the United States to be unprecedented in the history of nations. Add to this the higher education imparted in the hundreds of colleges and technical schools scattered throughout the country, and we have before us two most potent factors—the means and the desire. These conditions and the co-operation of these forces have within the recollection of the present generation changed prevailing styles of home, business house and manufactory from mere uniform, sub-divided square boxes into things of art and beauty, full of pleasant surprises to the eye, and replete with all the appliances that education can demand, all the contrivances that ingenuity



WILLIAM W. MORGAN,
SUPERINTENDENT EXHIBITION DEPARTMENT.



can devise, and all the artistic embellishment that money can secure. Formerly the carpenter and builder drew the plan and built the house, following the beaten path, both as to form and material, laid down by generations of worthy predecessors in the same honorable craft. He took the stone from the nearest quarry, the brick from the local yard, the lumber from the adjoining woodland, the sand from the creek near by, the lime from his neighbor, and the materials were gathered. Now, the architect, skilled in his profession, is called into requisition. Purpose, location, and effect are all carefully gone over and considered. Materials and appliances, from foundation to finial, are discussed and decided upon. One who is building is not disposed to have his house designed and built exactly like any other which he has seen, and, to be in keeping with the spirit of the times, he feels it incumbent upon him to introduce some style or material entirely novel. This leads to endless variety and combination in plan, material and finish, and, to meet this demand, constant changes are going on in the preparation or in the manner of putting in place almost every item which enters into the construction of the building. Manufacturers and dealers in building materials find it nec-

essary to meet this condition of the building trades, and have added one after another to the items entering into their business until the list has become a formidable one, and the question of how best to place them before the building public has become most serious and important. Owing to the bulk and weight of building materials it is almost impossible to show them to advantage in a business office, and the profits on their manufacture are not generally sufficient to warrant the expense of a store or showroom in the business portion of the city in addition to the cost of the necessary yard or manufacturing building, which, in most cases, is located in the suburbs or perhaps in a neighboring town, where intending purchasers find it inconvenient or expensive to reach them.

The above conditions in Philadelphia have led to the establishment of the Builders' Exchange Permanent Exhibition, consisting of an aggregation of almost every conceivable material or device which enters into the construction and finish of a modern building from cellar-wall to weather-vane. The exhibits are classified and arranged in such manner as to admit of close inspection, whereby a visitor may be enabled to judge of their value as constructive and finishing elements.

When projected and first opened the Exhibition was in a great measure experimental, but so great has its popularity become among those who are desirous of introducing their goods to the building public that the management has been compelled to ask the Exchange for all the additional floor space that it is possible to obtain. From this it will be seen that the enterprise has passed the experimental stage, and that it has proven itself an improvement which is eminently practical, attractive and profitable in comparison with the methods heretofore adopted to direct the attention of the public to new or desirable articles in the building line. Any architect can freely visit the Exhibition and select from the multitude of practical and ornamental styles, qualities and varieties of the different materials, that which is best suited to his uses in carrying out his plans. His client can come and devote as much time as he chooses in a careful examination of all the exhibits, and can thereby store his mind with a knowledge of building which was heretofore practically unattainable; the capitalist who builds for an investment can decide which are the most appropriate, durable and economical materials; the artisan engaged in the actual work of erecting buildings can obtain

new is of value to him in handling the materials which he uses in his work. As a whole, the Exhibition constitutes a great object lesson dedicated to the advancement of architectural and mechanical information and to fostering the arts and sciences connected with modern building.

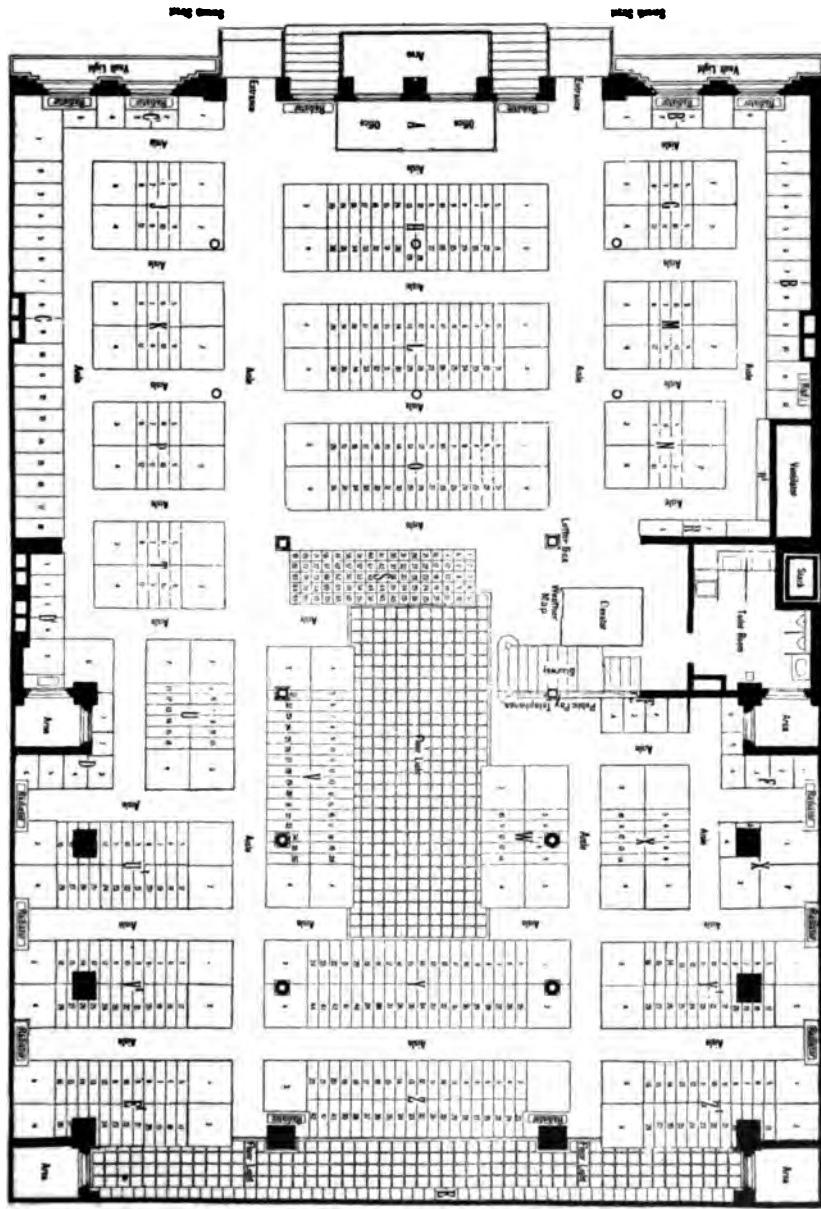
CONTROLLED BY THE EXCHANGE.

The Exhibition is in charge of a Committee of five members of the Exchange, who are appointed by its President and of a Superintendent, who is the executive head of this department and who is elected by the committee, subject to the confirmation and approval of the Board of Directors. The Superintendent makes monthly reports to his committee, and these reports are submitted to the Board of Directors at their regular meeting, thereby bringing the Exhibition directly under the management and control of the Exchange.

PLAN OF THE EXHIBITION ROOM.

The Permanent Exhibition, while dedicated to the purposes named and conducted in such manner as to make it a popular resort for everyone in any way connected with building interests, as well as the general public, is at the same time a business enterprise.

FLOOR PLAN OF EXHIBITION ROOM.



THE NEW YORK
PUBLIC LIBRARY

ASTOR, LENOX AND
TILDEN FOUNDATIONS.

Platforms, slightly raised, with aisles running between them, take up the entire floor space. Each of these platforms constitutes a section, and they are all marked by letters of the alphabet. The sections are sub-divided into spaces, which are numbered. The revenue necessary to support and advertise the Exhibition is derived from rents of these spaces, which are leased to manufacturers, inventors, dealers or agents for the display of such goods as are admissible, for a term of not less than one year. Changes can be made in the displays from time to time whenever the exhibitor so desires. Privilege of leasing space is not confined to members of the Exchange.

TERMS AND COST OF SPACE FOR AN EXHIBIT.

The spaces are leased for a period of not less than one year, and rents are payable quarterly in advance. The cost of floor or platform space is \$5.00 per square foot per annum.

In addition to the spaces on platform there is a limited amount of wall space, for which the charge is \$2.50 per square foot per year. These spaces are very desirable for some classes of exhibits.

For the accommodation of those desiring to exhibit models or small articles, such as hard-

ware specialties, a handsome stand or table of quartered oak, five feet wide by seventeen feet long, has been provided. This table is constructed in the form of shelves or steps one foot wide, and is accessible from all sides. Exhibits placed upon any portion of it can, therefore, be plainly seen and readily examined. The charge for an exhibit on this table is \$10 per square foot per annum. Its location is one of the most prominent and desirable in the Exhibition Room, being near the centre of the building and alongside the stairway, light-well, elevator and public-telephone booths.

CLASSIFICATION OF EXHIBITS.

The following classification will give some idea of the scope of the Exhibition. Efforts have been made to keep the classes separate and distinct as far as possible, so that all the exhibits shown in the same line of business will be close to one another.

Class I. Stone, all kinds except artificial.

Class II. Bricks, Cement, Terra-Cotta and Artificial Stone.

Class III. Lumber, Interior and Exterior Wood-work.

Class IV. Wrought and Cast Iron, plain and ornamental.

Class V. Sheet Metal Work, plain and ornamental.

Class VI. Roofing Slate, Tile, Slag, etc.

Class VII. Sanitary Appliances, Plumbing, Steam Fittings, Radiators, Steam Heating, etc.

Class VIII. Heaters, Ranges, Grates, etc.

Class IX. Plastering, Metal Lathing, Substitutes for Plaster.

Class X. Ornamental Tiles, Fire Places, Mantels, Interior Decorations.

Class XI. Hardware and Artistic Metal Work.

Class XII. Stained, Cut, Plate and Ornamental Glass.

Class XIII. Paints, Coloring, Varnishes, etc.

Class XIV. Gas Fixtures, Electric Lighting, Bells, Tubes, etc.

Class XV. Steam Boilers and Engines, Electric Motors, Pumps, Wind Mills, Hoisting Machinery, Vertical Shafting, etc.

Class XVI. Miscellaneous Articles and Appliances.

TEMPORARY SPECIAL EXHIBITS.

A space five feet square has been reserved in the centre of the Exhibition Room for small exhibits and for special temporary exhibits. Exhibitors often have some fine piece of work

placed to order for a certain building which may not be far enough advanced in its construction to be ready for it. Such articles are permitted to be shown for a few days only as a special exhibit on the space provided. For this no charge is made.

PERMANENT

In addition special exhibits have been prepared, arranged by the Exhibition Department, instruction and information of the public. One of the most interesting of these is a wall constructed of stone and brick. This wall, consisting of eleven panels of stone and ten panels and piers of brick, illustrates in a practical manner the various styles of stone masonry usually employed and the several ways in which bricks are laid, and, at the same time shows a variety of kinds, qualities and combinations of the two materials. This exhibit is located in the rear of the room, and forms one of the greatest attractions. That a more definite idea may be obtained of this work a list of the panels is given.

SPECIAL EXHIBITS.

sified and temporary
of exhibits have been
it in place by the Ex-
the free general use,
n of the public. One
f these is a wall con-
structed of stone and b... This wall, consist-
ing of eleven panels of stone and ten panels and
piers of brick, illustrates in a practical manner
the various styles of stone masonry usually em-
ployed and the several ways in which bricks are
laid, and, at the same time shows a variety of
kinds, qualities and combinations of the two
materials. This exhibit is located in the rear
of the room, and forms one of the greatest
attractions. That a more definite idea may be
obtained of this work a list of the panels
is given.

THE ARTISTIC WALL OF MASONRY.

No. 1. Stone Panel.—Coursed work, rock face, dressed bed. Shown in redstone.



SECTION OF EXHIBITION ROOM, 1892.

No. 20. Brick Pier.—Combination of colors, black, mottled and red. Shown in mottled Pompeian and Roman.

No. 21. Stone Panel.—Log-cabin-work, rock face, dressed beds. Shown in brownstone.

Specimen Pebble Dashing.—Pebbles partially embedded in cement.

Specimen Pebble Dashing.—Pebbles entirely embedded in cement.

HISTORY OF HABITATIONS.

This special exhibit consists of twenty-five fine photographs arranged in one large frame, illustrating buildings erected at the Paris Exhibition in 1889, showing the habitations of men of various countries and ages. These were imported expressly for this Exhibition, and make a most interesting study. Half-tone illustrations of these photographs will be found throughout this volume.

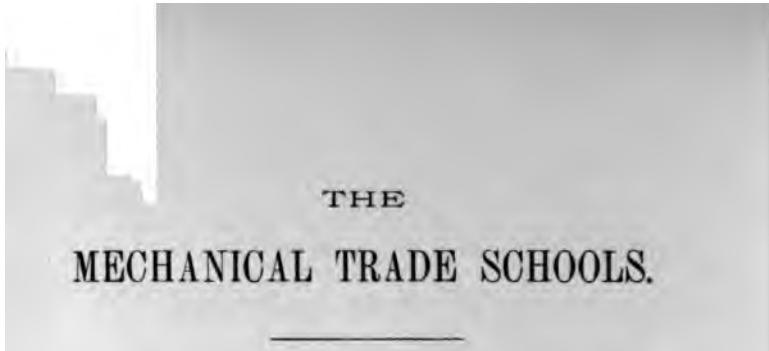
ARTISTIC COUNTRY SEATS.

A special exhibit of one hundred phototypes of country seats and suburban residences throughout the United States. Forty of these are arranged in ten handsome antique oak frames, four in each frame. The remaining sixty pictures are placed in boxes located in a position where they are convenient for a close examination. Printed description, ground plan, etc., of any of these country seats can be ex-

amined by visitors applying at the office of the Superintendent of the Exhibition.

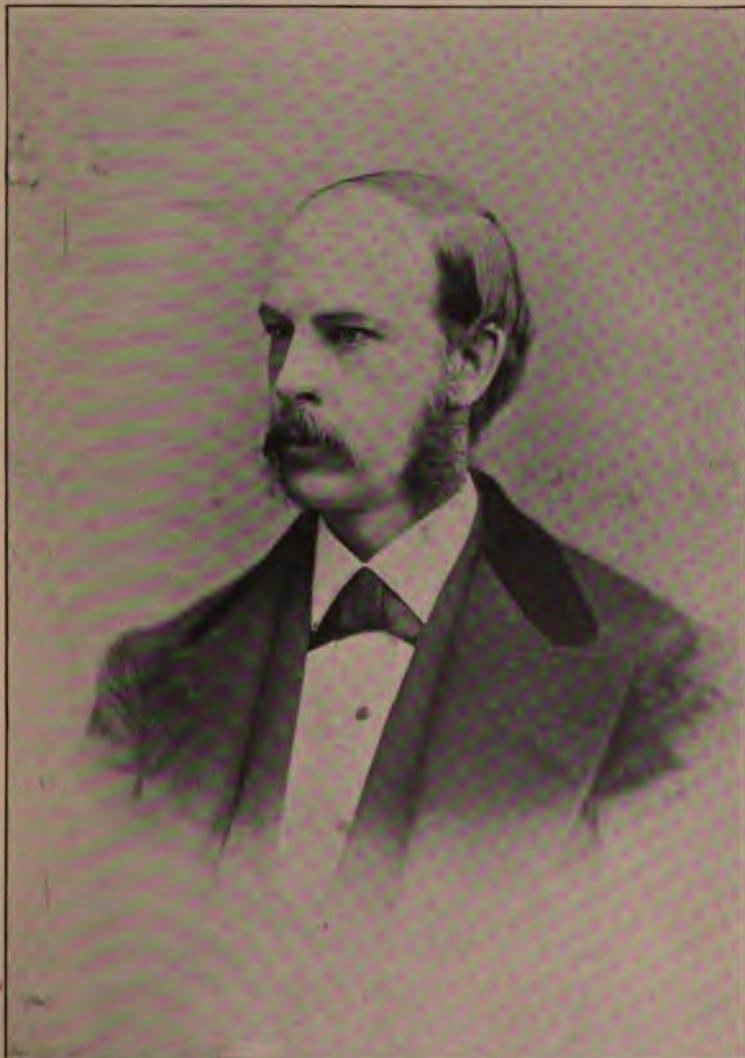
MODEL OF JAPANESE TEMPLE.

An exquisite piece of Japanese workmanship in wood and metal in form of a model of one of the temples dedicated to Shintô worship, at Nikkô, a sacred locality about one hundred miles north of Tokio, occupies the centre of the room. A half-tone illustration of this beautiful work of art has been inserted in this volume, and an elaborate description is given on page 284.

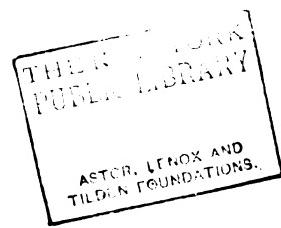


THE MECHANICAL TRADE SCHOOLS.

The basement of the building contains, exclusive of boiler room and space occupied by elevator machine square feet. American youth a the Exchange Mechanical T organized prima for entrance into tl tices, but any vacancies are filled by those already at the trade and who wish to improve themselves more rapidly. The basement is fitted up for the seven building trades of Carpentry, Bricklaying, Plastering, Stone-Cutting, Blacksmithing, Painting and Plumbing, and it is in contemplation to add others if space can be found. Instruction is given in both the practical and theoretical branches, two evenings in each week being devoted to the former and one to the latter. Each class is in charge of a committee of three employers in that trade, and the practical instruction is given by skilled workmen who advance the pupils from one



WILLIAM A. H. ALLEN,
SUPERINTENDENT MECHANICAL TRADE SCHOOLS.



exercise to another when they satisfactorily perform and thoroughly understand the work assigned them.

A regular succession of exercises is observed in each trade, and when these are completed the pupils are considered capable of undertaking the combination into finished pieces of work. All exercise work is executed from the prints, but other portions are, as far as possible, laid out in the drawing room before being executed in the shop.

The drawing classes are accommodated in the Exchange room, where instruction is given in the theoretical portions of the trade, in the reading of plans and the preparation of working drawings. Here, also, a regular course of exercises is followed, and includes the calculations in ordinary arithmetic required for the trade.

The theoretical instruction is given in the form of questions and answers, the pupils being provided with books containing the former, in which space is left for the answers. These books are retained for the purpose of study in preparation for the written examination.

This is held at the end of the term and combined with the average for shop work. If these reach an average of sixty-five a certificate is granted, and forms one of the best possible recommendations.

The term begins September 1 and ends with the last of May following. The classes are held in the evenings from 7.30 until 9.30. All material and books are furnished, both in the shop and the drawing room.

Some 270 pupils have attended the schools, and of these about two-thirds have received certificates. Many of them have entered their respective trades as apprentices, and their employers express very favorable opinions of their knowledge and capacity. In many cases inspection of the pupils' work decided their choice of the graduates, and some have declared that if the boys come to them with only the knowledge of the use of their tools as the result of their instruction they were worth to them their first year of apprenticeship.

In addition to affording an opportunity of entering trades, which is otherwise difficult, the Committee propose to furnish employers with a better-instructed class of apprentices, and, eventually, workmen, and from the experience of two terms feels justified in considering the attempt successful. It is encouragement in its most practical form when pupils return for a second term to the schools and recommend them to their acquaintances, and when employers reward application by the selection of those





MURRELL DOBBINS,
PRESIDENT, 1892.

MURRELL DOBBINS.

By electing Murrell Dobbins to the Presidency of the Master Builders' Exchange in January, 1892, the members rewarded one of the most active men of that organization. He was born in Burlington county, New Jersey, and belongs to an old Quaker family. After receiving a good English education he moved to Philadelphia and served a regular apprenticeship with his brother, Richard J. Dobbins, the well-known builder. He remained with him for a number of years, during which time they erected some of the largest buildings in the city, including the Ledger building, House of Correction, Memorial Hall and the Main Centennial Exhibition building.

Since 1876 he has been extensively engaged in the manufacture of bricks, the management of his real estate and a large stock farm in New Jersey. He controls four brickyards with an annual output of 30,000,000 per year, which makes him the largest individual manufacturer of bricks in the United States. He has taken an active interest as director in the Builders' Exchange since its inception. He is a member of the Board of Port Wardens and a director in several important financial institutions. By assuming its Presidency and by his financial management, tact and ability, he contributed more than anyone else towards saving the Third National Bank of Philadelphia from failure at a time when the closing of its doors would have precipitated a run on every financial institution in Philadelphia.

whose efforts placed them at the head of their classes. From past experience future improvement can be confidently expected, and where employers and workmen are alike benefited an enterprise can be no longer considered as an experiment.

George Watson, President, called the Sixth Annual Meeting of the Exchange to order on January 26, 1892. The annual report of the Board of Directors with those of the Treasurer and Standing Committees were read, all showing that the organization had gained in strength, wealth and influence during the year and anticipating a prosperous New Year. The tellers announced that Franklin M. Harris, John Kisterbock, Charles P. Bancroft, Allen B. Barber, John E. Eyanson, Murrell Dobbins, William B. Irvine and Peter Gray were elected members of the Board of Directors.

Upon organization the new Board of Directors elected Murrell Dobbins, president; William H. Albertson, Franklin M. Harris and Charles Gillingham, vice-presidents; William Harkness, Jr., secretary; Charles H. Reeves, treasurer and Jacob Janney, superintendent.

At the Sixth Annual Convention of the National Association of Builders held at Cleveland, Ohio, January 18, 19 and 20, 1892, the Phila-

delegatess took a leading part. President Allister paid high tribute to the Philadelphia Exchange in his opening address, in which he said :

It is with great pleasure that I welcome you, on behalf of the Building Trades' Association of Cleveland, to our city. For the sixth time we are assembled here to consider questions which are of the greatest importance to us as builders, and that we should give the discussion of these questions the most earnest thought. That there are demands to demand throughout the country sufficient importance shown by your presence here to-day.

The report of the Secretary will inform you as to the work which has been accomplished in whole or in part during the year just closing, and while I do not desire to anticipate anything he may have to say, I can but express regret that more vigorous action has not been taken in the matter of organizing and fostering trade schools.

As I am informed, Philadelphia stands almost or quite alone in this matter, and if American boys are to learn mechanical trades they must have the opportunity of doing so provided by

MECHANICAL TRADE SCHOOLS—CLASS IN PLUMBING.



such schools. Our workmen are supplied almost exclusively by immigration, very much of it of an undesirable character—indeed, largely of such character as to cause serious damage to the well-being of the country and to threaten the permanency of our institutions. I am fully in accord with the published resolutions of the Workmen's Associations in New York, only I would not confine the restrictions to the Chinese. As good citizens we should encourage the establishment of trade schools, and as organizations the Exchanges affiliated with the National Association, working in harmony, could do much toward the accomplishment of this object.

I entertain the hope that your presence here will have the effect of assisting our local builders to a better appreciation of the advantage of proper organization and of affiliation with the National Association—not organization having for its object the getting of something for nothing, but organization whose aim shall be to place the building business upon a plane as high as that of any business practiced in this broad land. The value of the interests involved in our business is so large as to demand an ability and an intelligence second to that required of no other business men, and we should avail ourselves of every possible source of information in

the acquisition of a thorough knowledge of the best business methods. We should cultivate a high sense of business honor, and have full regard for the rights of our fellows.

Let those of us who are less fortunate, less fully equipped, those who are not yet upon the high plane which they should occupy, receive assistance and encouragement from those more highly gifted.

It has been said by a great American—I do not give his exact words: “There is a wise selfishness which prefers its own family, its own city, its own State, its own nation, to another’s family, city, State or nation.” Now, let us cultivate that kind of selfishness, and if we do not care more, let us do more for our own fellow craftsmen than for others. While urging our fraternity in the direction of higher and better business methods, let us insist upon the correction of some of the abuses from which we all suffer. In almost all contracts that are made the builder, through the wording of the contract itself, or of the specification which is always a part of the contract, is made to occupy a subordinate and wholly inferior position.

One of the most level-headed attorneys in this city said to me two years ago, in speaking of a contract which I had myself signed, “It

always makes me mad to read a contract such as builders sign."

This question of the character of the articles of agreement has been considered by this Association, and may be said to be in a fair way of settlement upon a basis equitable and just, but the uniform form of contract has come into but partial use, due in a large measure to the fact that every builder feels that if he refuses to sign the agreement submitted for signature there is a builder standing behind him who will sign, and so, in absence of effective organization, the abuse continues and grows. It may be accepted as an aphorism that the man who submits to abuse invites abuse, and is certain in the end to be abused. In every business except ours a man who makes an agreement to do a certain thing has that thing specifically set forth, just that and nothing more—the thing to be done and the amount to be paid, both limited, fixed.

Now, in the agreements which we make, the amount to be paid is fixed, the work to be done only partially so; both drawings and specifications are very frequently incomplete, but the owner is protected against loss on this account by some such phrase as this in the specification. "All work necessary to complete this building

and which may not be specifically set forth herein shall be done under the direction of the architect without additional cost." Now the builder who signs a contract with such a phrase as that above quoted in the specification agrees to do for a stipulated sum an amount of work limited only by the conscience of the architect. It is no answer whatever to this to say that the architect is usually fair and that he rarely takes advantage of his opportunity to damage the contractor. There is no reason in justice why **he should have the opportunity to do so, and every reason why he should not.**

In all this there is no intention of seeking any quarrel with architects or of casting any imputation of bad faith or unfair dealing upon them. The architect, like the lawyer and other professional men, is zealous in the interests of his client, as he ought to be; he is, of course, always desirous that his work, both in design and execution, shall be satisfactory to his employers, that he may be again employed: but above all is his zeal for his client's interest, the precise quality which entitles him to his client's confidence and commissions, and without which he could not honorably discharge his duties; but this zeal, however honest and honorable he may be, is the exact thing which disqualifies

him for the position of arbiter between his principal and the other party to the contract. Even if it could be shown that in no single instance since the world began had an architect been known to render a decision which was not grounded in absolute justice, still it would be unbusiness-like in one party to a contract involving the expenditure of money to place his interests at the disposal of an arbiter who was the paid agent of the other party to the contract. Who ever heard, except in the building business, of an arbitration in which the attorney or agent of one of the parties to the dispute acts as sole arbiter? The contracts as now written are inequitable for want of mutuality.

I have noticed in the *American Architect and Building News* of January 9, 1892, an address delivered by Mr. Walter Dickson before the class in architecture of the Department of Architecture of the Brooklyn Institute, December 22, 1891, at the Art Institute.

I do not know, but presume that Mr. Dickson is an architect. He was urging the young men of the class to strive to inform themselves upon the constructive part of their profession, and said :

“ If an architect is deficient in the practical part of his profession I defy him to be able to

draw a correct specification, properly explaining the whole of the work intended, and when a specification is deficient the architect, in order to maintain his dignity and save himself, has been known to exact from the builder, by some peculiar interpretation of his own, the work so omitted. Many a builder has been ruined in consequence, and by the architect also refusing to give proper compensation for extra work, thus withholding the certificate until the work was completed to the architect's satisfaction and to the contractor's ruination." Observe the arrangement of this passage; you will notice how closely the "ruination of the contractor" follows the "satisfaction of the architect," as effect follows cause. You will also notice that it is the architect, and not the builder, who makes the statement.

Now, I want to say in all seriousness that I have never yet met the grade of architect to which the gentleman referred to by Mr. Dickson belongs, but I am liable to meet him at any time.

There is no reason why any interpretation that is necessary should not be made before the price is fixed and the agreement signed. I know that the claim is made that it is impossible to foresee all points which may come up.

If that is true, then leave those points to be taken care of by subsequent agreement, as is now done in some of the best offices. Why require the builder to draw upon his imagination and anticipate that which it is admitted cannot be foreseen?

It is our legal and just right to have the agreement limit the work to be done as rigidly and completely as the sum to be paid is limited. There is another matter in this connection to which I feel justified in calling your attention, and that is the subject of bonds of indemnity and a reservation of payment.

To illustrate: A builder agrees for 500,000 dollars to erect a building complete. He is required to give bond of indemnity for not less than 100,000 dollars, conditioned that he shall complete the work in accordance with certain drawings and specifications which are to be interpreted by a gentleman who is the paid agent of the owner, and in addition to this bond there is reserved payment of not less than fifteen per cent. of each of the partial payments provided for under the agreement, which reserved payment remains in the hands of the owner until the building is completed (usually thirty days after completion and acceptance). When the building has been carried to within 20,000 dollars of

com] on and the builder has been paid according to agreement up to that time, the owner has in his possession 72,000 dollars' worth of work which has been completed by the builder and not paid for, and his bond for 100,000 dollars to secure the completion of 20,000 dollars' worth of work, and at the completion of the v or to acceptance the owner has the builder's money and a bon rs.

In prac mount to just this:
At the clos ract, supposing that
the work ha ed in one year, the
builder has er a bond as above
stated for the privi ving the owner keep
72,000 dollars of the builder's money for about
seven months and of 20,000 dollars for thirty
days without interest. As a business proposition
I think nothing could be more inequitable.

In the ordinary business of life it is the man who owes the money who has to give the security. We have not yet reached ordinary methods. The absurdity of this arrangement is further shown by the fact that as the responsibility of the builder under the contract is diminished his guarantee is increased, and in the case supposed above the owner holds the same bond as at the beginning, plus



ROMAN HOUSE—TIME OF AUGUSTUS.

HABITATIONS OF MEN. PARIS EXPOSITION, 1865.



THE NEW YORK
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1000 BROADWAY

92,000 dollars, while the builder's obligation has practically ended. What is the remedy? Is there any reason in justice or fairness why some such arrangement as this should not be made? When twenty-five per cent. of the money value of the building has been put in place and accepted by the owner through his agent, the architect, have a settlement and pay the reservation up to date. The owner's guarantee is not impaired, because he has the same bond for the completion of seventy-five per cent. of the work as he originally had for the entire building. Now let this be done at the completion of fifty per cent. and again at seventy-five per cent. of the work. Even under this arrangement the guarantee which the builder gives the owner increases as the builder's responsibility decreases.

These abuses to which I have referred are not of recent growth. They began at a time when the profession of architecture was not much regarded in this country, when its practitioners were, in the main, men of little education, most of them graduated from the carpenter's bench, the bricklayer's scaffold and the stone-cutter's banker.

They were practical men with good practical knowledge, but they had no literary training

and had acquired but little ability in the art of setting forth in specifications the requirements of their buildings, and in this way, I apprehend, arose the necessity for covering the defects in their drawings and specifications by some general requirement under which a builder who had contracted to build a church could be held to build a steeple also, though none had been shown or specified, because the church was to be complete, and no church is complete without a steeple. This system of making blanket clauses to cover all sorts of contingencies gave them great advantages, and the architects, like other men, will hold any advantage which custom gives them as long as they can. But they do not need this advantage now. The profession is now full of men thoroughly educated, trained designers and constructors, who know what their buildings require and how to impart that knowledge to the intelligent builder, and I can see no reason for the perpetuation of this old makeshift, the necessity for which passed away with the men who devised it. Therefore I think that an open and manly demand for the use of the uniform form of contract and the elimination of all ambiguity in specifications, all necessity for "interpretations," "peculiar" or otherwise, will be readily acknowledged by architects.

And now, gentlemen, in closing let me congratulate you upon the fact that our Association is and has been exercising a wide influence not only in our own country, but beyond the seas. I am told by our Secretary that he has applications from almost every part of the English-speaking world for reports of our proceedings and other of our literature. This shows us that wise action on our part may produce effects beneficial to our craft in places far removed from us. For this and for many other reasons let us try to do our work well. [Applause.]

The majority report submitted by the Committee on Credentials resulted in the withdrawal of the Pittsburg Exchange from the National Association. Three of the seven delegates from Philadelphia voted to seat the eighteen delegates sent by the Pittsburg Exchange, while the majority voted to seat only four. The following extracts from the official report of the Convention explain the difficulty.

MR. WILLIAM HARKNESS: Mr. President, at the request of the chairman of the committee, I will read these two reports—I have a majority report and a minority report. I will first read the majority report :

REPORT OF COMMITTEE ON CREDENTIALS.

MR. PRESIDENT AND GENTLEMEN OF THE CONVENTION:—Your Committee on Credentials begs leave to present the following report. There are credentials from twenty-six cities represented by ninety-eight delegates, as follows:

Boston	6	Milwaukee	3
Buffalo	4	Minneapolis	2
Baltimore	4	New York	7
Cleveland	2	Omaha	2
Chicago	13	Philadelphia	7
Cincinnati	4	Ioland	3
Denver	3	Evidence	3
Detroit	2	Hester	3
Grand Rapids	3	Inaw	2
Indianapolis	3	Louis	5
Louisville	3	St. Paul	4
Lowell	3	Wilmington	2
Lynn	2	Worcester	3

The Pittsburg Exchange has presented credentials containing the names of eighteen delegates. The Secretary's list shows they are only entitled to four. Your committee is unable to decide which four are entitled to seats and refers the matter to the judgment of the Convention.

Respectfully submitted,

WM. D. COLLINGWOOD,
GEO. W. LIBBY,
JAMES I. WINGATE,
C. C. DEWSTOE.

I will now read the minority report as follows:

I offer the following as a minority report on credentials:

I do not concur in the majority report on credentials so far as it applies to the Pittsburg Exchange and report the following as the legal and properly authorized delegates:

T. J. HAMILTON.

(Presenting the names of eighteen delegates.)

PRESIDENT McALLISTER: The report of the Committee on Credentials is before you. What is your pleasure?

MR. J. M. BLAIR, of Cincinnati: I move that the majority report of the committee be adopted, with the amendment that the names of the first four delegates named by the minority report be added as the representation of Pittsburg in this Convention.

MR. JOHN S. STEVENS, of Philadelphia: I second the motion.

MR. F. M. HARRIS, of Philadelphia: I move to amend by the adoption of the minority report.

MR. MADDEN, of Chicago: I second the amendment.

PRESIDENT McALLISTER: The question will be upon the amendment offered by Mr. Harris, that the minority report of the Committee on Credentials be adopted. Are you ready for the question?

MR. HARRIS, of Philadelphia: My thought was this, that last year, upon the report of the number of members belonging to that association they were entitled to a certain number of delegates, and there was no question about it. To-day they come here to legislate for the ensuing year, not for last year, to legislate in the interest of some nine hundred members, not

two or three hundred members; and I do not think that we can afford to have the rest of the associations represented under our Constitution for their full number, and some six or seven hundred men not represented at all, because between now and the next Convention it is possible that some of those men may withdraw. We all know that the increase in the Pittsburgh Exchange was caused largely by the existence of a strike; they found it essential for their mutual protection and benefit to connect themselves with that Exchange, and they have done so. After they had entered they became full members of that Exchange, they sent, as I understand, according to our Constitution, certain members to represent them at this Convention, to enact laws for their and your guidance, or to assist in doing it, for the coming—not for the past year, but the ensuing year, and for that reason I think they are entitled to have every man they have sent here upon the roll of our delegates.

MR. W. R. STOUGHTON, of Pittsburg: The Pittsburg Builders' Exchange elected their delegation, as they thought, in accordance with the By-Laws adopted and in force by this National Association of Builders. Since last February,

when our per capita tax was paid for 1891, our membership in that Exchange has increased to about 858 members. We elected our delegates for the purpose of coming here and enacting, as my friend from Philadelphia has said, laws to govern us for the coming year of 1892, not for the past year; we have got through that. We based our action not only on the Constitution of this National Association, but on the fact that at the first meeting of this National Association they elected their officers and fixed the amount necessary for the running expenses of this National Association for the ensuing year, and not for the previous year. That per capita tax, of course, was paid, and it has been paid since. In 1891 the per capita tax was fixed to cover the expenses for the year ensuing. We have come here with eighteen delegates from our Exchange, owing to increased membership in the past year. We have come here not only to help you enact laws for this National Association, but also to pay the per capita tax for the ensuing year, not for the past year; that is why we ask and think that our delegation should be seated in this Convention.

MR. BLAIR, of Cincinnati: Mr. President and gentlemen:—Every delegate present in this Convention to-day is aware of the fact that imme-

diat following the adjournment of this Conve. ion we return to our constituents and say to them that within thirty days we expect them to decide upon the membership in our Exchanges and the representation in the coming Convention ; we, therefore, prepare to elect the number of delegates as prescribed by the Constitution, givi
are on the re
following this
we all know,
from the time
vention to the
year following
ment of this Conv.
the business of this Convention is ended by the
year 1891.

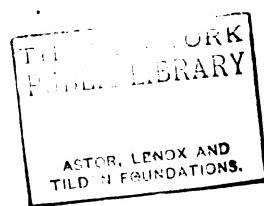
fifty members who
ithin the thirty days
The ensuing year,
the year extending
nent of one Con-
of the next. The
es with the adjourn-
or, in other words,

Now, as to the matter of Pittsburg, it is understood that along in June they paid their assessment on a certain number of members that were enrolled in their Exchange, and that upon that representation they were to be credited in this Convention with one delegate for each fifty members. This Convention is the winding up of what is called "the ensuing year" in the Constitution, upon which the membership is ascertained and the delegates are apportioned. I would like, if it were possible



GALLO-ROMAN HOUSE—TIME OF CLOVIS.

Habitations of Men, Paris Exposition, 1889.



for me, to assist Pittsburg by saying that they should have eighteen rather than four delegates; there is not a man on this floor who feels more like saying "Come in with eighteen delegates," but I feel that it is an injustice to Chicago, Philadelphia, New York and other cities that have paid their assessments on ten, twelve or more delegates and should be represented here. It is true that the business of this Convention is for the following year, but why is it not possible for Pittsburg to come to the next Convention with eighteen delegates and then demonstrate to the National Association that they are able to revolutionize any matters that have been adopted by this organization? I, for one, am in favor of the majority report, and cannot possibly see wherein that report is not proper and right.

PRESIDENT McALLISTER: The question now will be on the amendment of Mr. Harris, of Philadelphia, that the minority report of the Committee on Credentials be adopted.

A DELEGATE: I call for the yeas and nays.

MR. DEWSTOE, of Cleveland: I move that they be called from the list prepared by the Secretary.

A DELEGATE: I second the motion.

SECRETARY SAYWARD: Whenever votes of this kind have been taken it has been the cus-

tom for the chairman of each delegation to announce so many votes in favor and so many opposed.

PRESIDENT McALLISTER: If it is the pleasure of the Convention we will proceed in the manner indicated by the Secretary.

SECRETARY SAYWARD: When the name of a city is called the chairman of that delegation is to announce how many vote aye and how many vote nay.

PRESIDENT McALLISTER: The question is upon the adoption of the minority report.

SECRETARY SAYWARD: Boston, entitled to five votes.

THE CHAIRMAN: No.

SECRETARY SAYWARD: Buffalo, entitled to four votes.

THE CHAIRMAN: No.

SECRETARY SAYWARD: Baltimore, entitled to four votes.

THE CHAIRMAN: No.

SECRETARY SAYWARD: Cleveland, entitled to two votes.

THE CHAIRMAN: No.

SECRETARY SAYWARD: Chicago, entitled to thirteen votes.

THE CHAIRMAN: Chicago votes eight no, five yea.

SECRETARY SAYWARD: Cincinnati, entitled to four votes.

THE CHAIRMAN: Four votes, no.

SECRETARY SAYWARD: Denver, entitled to three votes.

THE CHAIRMAN: One no and one yea, the other not present.

SECRETARY SAYWARD: Detroit, entitled to three votes.

THE CHAIRMAN: Two no and one yea.

SECRETARY SAYWARD: Grand Rapids.

THE CHAIRMAN: Two yes and one no.

SECRETARY SAYWARD: Indianapolis, entitled to three votes.

THE CHAIRMAN: One no and two yea.

SECRETARY SAYWARD: Lowell, entitled to three votes.

THE CHAIRMAN: Three no.

SECRETARY SAYWARD: Lynn, entitled to two votes.

THE CHAIRMAN: Two no.

SECRETARY SAYWARD: Milwaukee, entitled to three votes.

THE CHAIRMAN: Three no.

SECRETARY SAYWARD: Minneapolis, entitled to two votes.

THE CHAIRMAN: Two no.

SECRETARY SAYWARD: New York, seven votes.

THE CHAIRMAN: Six no and one yea.

SECRETARY SAYWARD: Omaha, entitled to three votes.

THE CHAIRMAN: Two yea and one no.

SECRETARY SAYWARD: Philadelphia, seven votes.

THE CHAIRMAN: Three yea and four no.

SECRETARY SAYWARD: Portland, entitled to three votes.

THE CHAIRMAN: Two no.

SECRETARY SAYWARD: Pittsburg, entitled to four votes.

THE CHAIRMAN: All yea.

SECRETARY SAYWARD: Providence, entitled to three votes.

THE CHAIRMAN: Two no and one yea.

SECRETARY SAYWARD: Rochester, entitled to three votes.

THE CHAIRMAN: Two no.

SECRETARY SAYWARD: Saginaw, entitled to two votes.

THE CHAIRMAN: Two no.

SECRETARY SAYWARD: St. Louis, entitled to five votes.

THE CHAIRMAN: Four yea, one no.

SECRETARY SAYWARD: St. Paul, entitled to three votes.

THE CHAIRMAN: Three no.

SECRETARY SAYWARD : Wilmington, entitled to two votes.

THE CHAIRMAN : Two yea.

SECRETARY SAYWARD : Worcester, entitled to three votes.

THE CHAIRMAN : Three no.

SECRETARY SAYWARD : The result of the vote is twenty-eight yea and seventy-one no.

MR. POWELL, of Pittsburg : I desire to ask the permission of the Convention to withdraw our delegation.

A DELEGATE : I would like to ask the gentleman if he has consulted with the rest of his confrères.

MR. POWELL : Yes, sir.

PRESIDENT McALLISTER : The question now is upon the adoption of the majority report. Those of you who are in favor will say aye ; opposed, no. It is carried and the majority report is adopted.

MR. POWELL : Mr. Chairman, we ask permission to withdraw.

PRESIDENT McALLISTER : I presume there is no authority that can compel you to remain if you do not desire to do so.

MR. SCRIBNER, of St. Paul : It may seem out of order at this time, but if I may be allowed to make a remark or two, I should appreciate

the privilege. [At this point the Pittsburg delegation began to withdraw from the room.] My suggestion is this: The Pittsburg delegation came here presenting certain views, honestly, no doubt; we all give them credit for that. I presume there isn't a member or a delegate on this floor but believes that they have taken their decision honestly, after careful thought and consideration at home, and believed they were pursuing the right course and that they were entitled to a representation of eighteen delegates on this floor. Since coming here they have learned by the action of our Board of Directors in considering this question, and also by the action of the delegates on this floor, that in the judgment of a large proportion of the persons present at this Convention they were in error; and their position having been decided an erroneous one, no matter how honest their preconceived notions, no matter how much in earnest they were in striving to do their quota toward advancing the interests of the builders of the United States through this large representation, allow me to suggest, as I have taken upon myself to do privately with some of the members of the delegation, that they accept pleasantly and kindly the decision of the large majority of this Board, and appoint from among

their own number four delegates who shall represent them here and allow the remaining fourteen to sit here as alternates through this Convention [applause], with the understanding that next year they will be represented by eighteen members, or whatever number they may pay for under the new assessment. Now, gentlemen, as representing St. Paul, I want to say that our Exchange paid a per capita tax based upon the number of members that we had last year, and we come here to-day with a representation based upon that arrangement. Though our membership might have been increased to 500 we should not have claimed that we are entitled to one single delegate more than we are entitled to as the representatives of the number for which we paid the per capita tax. If those gentlemen paid only on four delegates they are not entitled to more than four members as delegates to-day. We have no objection, and I don't believe any delegate here has an objection, to the remaining fourteen sitting here as alternates. They are welcome.

MR. STEVENS, of Philadelphia : No, there is no objection ; they are more than welcome.

MR. SCRIBNER : They are more than welcome. I have been connected, as many of you know, with this Association from its very in-

on, and I feel a deep interest in it. It is probable that my days with you are numbered, but I tell you that it would be with the most intense regret that I should see you gentlemen go from this floor with the feeling which will plainly animate you if you do so. Allow me, then, gentlemen, in the name of my colleagues and our fellow-members, to plead with you that you remain upon this floor, that you accept the decision of this body, even though you may think it wrong, even though you may think it unfair. Stay here with us, vote with us, remain identified with us; make this concession to the opinion of the majority. [Great applause.]

MR. POWELL, of Pittsburg: I wish to state that this delegation withdraws for consultation.

PRESIDENT MCALISTER: If there are no other suggestions we will take up the next business in order. The attention of the Chair has been called to the propriety of further discussion of the report of the Committee on Lien Law. The Chair supposed that the action upon the report of the Committee on Lien Law that was taken here this morning was the consideration of that report; but the chairman of the committee, who made the report, thinks that I am mistaken in that view, and that further con-

sideration of the report is now in order. If it is in order at all it is in order at this time.

MR. STEVENS, of Philadelphia: In adopting this report, Mr. President, it seems to me that you adopted this suggestion in it: "They therefore believe it would be to the best interests of all concerned to have this subject thoroughly and exhaustively discussed, with a view of securing the greatest amount of information on the subject by comparing the views of the delegates present."

PRESIDENT McALLISTER: Then you added the resolution appointing a standing committee for that purpose. However, the subject is before you if you desire to discuss it. Discussion is what enables people to reach a conclusion.

MR. E. H. TOWSON, of Cleveland: I understood that this matter was settled before, and that we acted upon the resolution of this committee. The report of the committee was adopted, and afterward the resolution was taken up and adopted. The adoption of that resolution most assuredly places this matter in the hands of a committee of seven. How this question can be discussed now I cannot see, until that committee of seven makes a report.

PRESIDENT McALLISTER: I think if we discuss it the standing committee will get the benefit of the discussion.

J. M. BLAIR, of Cincinnati: Mr. Chairman it occurs to me that this is a question of such importance that its discussion by the delegates from all over the United States will influence the action perhaps of the affiliated organizations, or, in other words, delegates on their return to the different cities they represent will express to bodies the feeling of these delegates, and occurs to me that suppression of or would be a mistake. I know that if the feeling exists that they would all the information possible, and that they expect us on our return to be able to say to them how the other cities feel in this matter, or if there is any suggestion as to form of a lien law, or the objections to having one at all. It seems to me that this discussion should be full and free and not be suppressed owing to the mere fact that we have adopted a portion of this report—that is, the resolution. If it is worth while at all to discuss this question it is worth while to discuss it now. The representatives from Cincinnati would like to hear an expression of opinion from all delegates present.

MR. HARRIS, of Philadelphia: I would state that I am not in favor of this Convention taking any *action* on a matter of this kind. Some

States don't want lien laws and others do, but having a discussion will not hurt anybody. Two years ago, in a discussion upon the lien law, a challenge was thrown out by my friend from Chicago that we couldn't do anything, that we weren't a power and that we couldn't influence legislation. That challenge rankled in my mind and in the minds of the people of Philadelphia, because if there is anything they hate to be told it is that they are slow and can't do anything. We made a test case as to what legislation the builders and material men of Pennsylvania could get. We found the entire legislature, both branches, against us; they informed us that there was no use of attempting anything of the kind, that we couldn't do what we wanted to do, that it was impossible. That stirred us up, and we gave them to understand in unmistakable terms that when the builders and material men of the State were united they could do something and that they were a power. The consequence was that a law was passed which went through the House with only one vote against it, through the Senate unanimously, was signed by the Governor, who said he would never sign it, and it is a law to-day. The way it was done—and I think this will be an advantage to the members

of the Convention—was that we sent out some twenty-seven or twenty-eight thousand type-written circulars to every contractor and material dealer in the State, asking them to mail them to the members of the House and the members of the Senate from their districts, signing their names and addresses. These circulars were sent broadcast all over the State of Pennsylvania, so that every morning when the legislator took his seat in front of his desk, piled up before him were documents enough to fill a barrel, and they dared not do anything against the wishes of citizens who took the matter in hand like that. Now, the whole of this came from some words uttered by Mr. Prussing, of Chicago, who championed the cause against having a lien law. We don't want any other State to have a law if they don't want it. We have had a lien law in Pennsylvania since 1806, and with some amendments it was never touched, and gave satisfaction. Some man who was dissatisfied with it took it to the Supreme Court, where it was decided unconstitutional. Now, what we did was simply to have it revised in such a manner that it wouldn't be declared unconstitutional. It wasn't three months before it was changed. The law was that the owner could not recognize anybody except the princi-

pal with whom he had made the contract; everybody else was thrown out and had no rights under the law. Every subcontractor, the moment he put his material in a building, had no redress whatever. Two contractors, partners, who had been working together for years, as soon as this decision of the Supreme Court came up, dissolved partnership and sent invitations around for estimates under the old firm name; they sent in bids, which were accepted, and then they failed. They had the lien, because each subcontractor supposed he was a general contractor contracting with these people who pretended to be the owners, only to discover that one of the parties had become the owner and the other the general contractor, and cut out all other contractors under the law. The result was a loss and the subcontractors couldn't get a cent. That is what started us, so that the subcontractors could have a lien, and we find we have in our Exchange to-day greater losses on jobs on which we have no lien than anything else. For instance, one of our contractors furnishes a lot of material for a schoolhouse; a subcontractor or general contractor takes a contract to build three schoolhouses, he gets into the subcontractor because he is supposed to be in good standing, and after

Is the schoolhouses he fails. Attempt to take the money that is in the hands of the Board, and the Board says: "According to the laws of the State no lien can be placed on any institution," so that man can draw the money and the subcontractors cannot get a cent. There is one man in our State that lost a great deal of money that way. Now no private institution can do that, and before we are satisfied with the lien law. Chicago don't want a lien law, all right, we don't care. We think that these matters should be discussed here, and the views of the present delegates as to liens and what benefit they are to them should be stated for the benefit of all. As I understand, the action of this Convention is simply advisory; and I think that as we don't get together more than once a year, everything should be ventilated in the best manner and everyone should have a chance to say what he wishes to say.

MR. GEORGE C. PRUSSING, of Chicago: I am delighted to learn from my friend Harris, of Philadelphia, that I have been of service to the State of Pennsylvania. When the gentleman took his seat, in my judgment he had failed to tell us specifically what substantial benefit the builders gained by the action of their legislature, action compelled by the voluminous correspond-

ence with which they flooded and submerged the legislative halls of Pennsylvania. I should like to be informed on that subject.

MR. HARRIS, of Philadelphia: I will tell you. Three months after the lien law was declared unconstitutional \$50,000 was lost in one operation, and there were fifteen or sixteen just such operations. The moment the law was passed they didn't lose a dollar. That is the benefit.

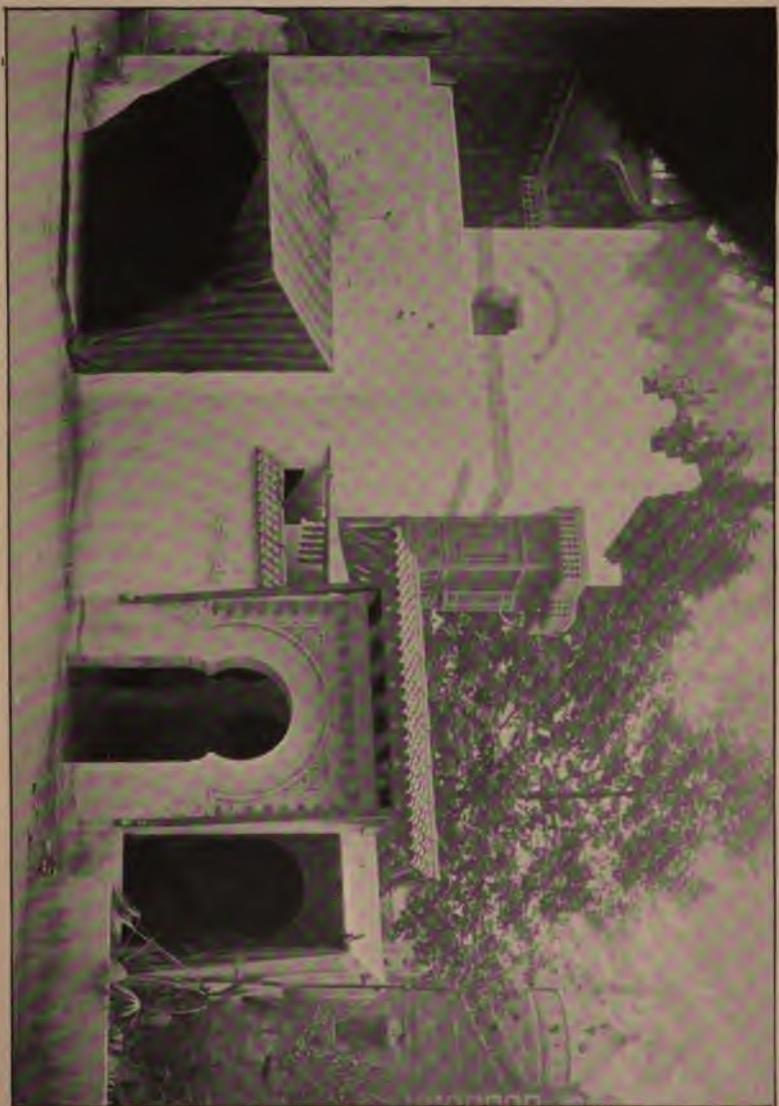
MR. PRUSSING, of Chicago: It seems to be a good law whereby nobody loses a dollar.

MR. J. E. TWINAME, of Indianapolis: Mr. President, I am very much in favor of this discussion, and I thought when I voted before for the committee that it was to get all the evidence before it and report back to us the best manner and most effective law of any State, so that we could get it boiled down a little. This evidence the gentleman from Philadelphia has given us is long, but if we wait for every city to do that it will take a long time, and I thought that was what the committee was appointed for. The evidence that the Secretary has got should all go before the committee, and then their report come to us, giving the best law in any State and the manner of procuring it, as I stated before, and then this Convention could take

act. I think all States want a law that would be equitable to everyone. We have a very good law in the State of Indiana now, and are very well satisfied with it. We had some such experience as the gentleman from Philadelphia has had; after all our labor in getting both Houses to pass the bill, the bill came up missing. There is a method of doing things which past finding out. It took us to another bill before the House at the next time round again. They themselves with a number of bills, at last they disappeared we replaced them and succeeded in getting one through; but all this discussion will be too long for this body, and therefore I thought if the committee was appointed that all the facts could be presented to the committee and then it could report back.

PRESIDENT MCALLISTER: Does any other gentleman want to speak? There is nothing before the house except this discussion.

MR. SAYWARD, of Boston: Mr. President: It was the desire of the Executive Committee in preparing the programme for this Convention, that arguments pro and con on this subject should be heard. The Executive Committee did not feel that the subject would be exhausted



ARABIAN HOUSE OF THE ELEVENTH CENTURY.

HABITATIONS OF MENS. PARIS EXPOSITION, 1867.

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when the Convention had been told whether Illinois wanted a lien law or not, or whether Pennsylvania wanted a lien law or not, but they believed there was much to be gained by a more thorough discussion of the *principle* of lien-law protection, for upon that there appears to be a vast amount of confusion in the minds of those individuals who desire to be "protected." It was the intention of the Executive Committee in laying out this programme to get a more thorough expression of opinion than we had ever had before on this important subject. We only get together once in twelve months, and if we simply refer the matter to a committee and don't even give the committee or the delegates an opportunity to find out what this man and that man and the other man really knows and believes about this question, we cannot influence or help the local bodies in this matter. The evidence of the gentleman from Philadelphia seems to be to the effect that the Philadelphia Exchange has been moving in this particular line of legislation and working very effectively. But it does not necessarily follow that the Philadelphia Exchange or the Legislature of the State of Pennsylvania know all that they ought to know about the principle of lien laws, and the ultimate effect of lien laws, and I think it will

be a benefit to the delegation from the Philadelphia Exchange, and through them to the Philadelphia body, if they receive illumination or information as to how some of their brothers feel in regard to the principle of lien laws and the result which that sort of legislation will produce. Now, I do not doubt but that the method adopted by the lien law which our brother Harris has described has produced a certain definite result, but I for one do not believe, as a business man, that it is a good proposition to have that kind of protection afforded to anybody through legislation! But, I am here to be informed, to hear the arguments which those who do believe in such methods have to offer, and I am ready to reform if I can be convinced.

MR. HARRIS, of Philadelphia: Would the gentleman allow me to interrogate him?

MR. SAYWARD: Certainly.

MR. HARRIS: The gentleman is misleading the Convention, not intentionally, but unintentionally, because the methods of different cities are different. In Boston, like Chicago, in nine cases out of ten the subcontractors make the bids direct to the architect, as I am informed, whether truly or not; I believe so as far as I know. In Philadelphia and Pennsylvania most of the contracts are made through a contractor.

outside of the architect, therefore, we don't stand in the same position. We wouldn't want a lien law if we stood in the same position as Boston or Chicago, or some other place whose mode of procedure is different from ours. Do you see the point? Because we would hardly want to lien the architect where we would have to lien a contractor. A shoemaker could be a contractor—

A DELEGATE: In Pennsylvania?

MR. HARRIS: Yes, in Pennsylvania. Because our contractors are such wise and good men.

MR. SAYWARD: I gave way, Mr. President, for a question, but I don't understand that any interrogatory has been propounded. What was the question?

MR. HARRIS: The question is that you were arguing against a lien law being of any use. You are arguing from the premises that you don't require it in Boston, or at least I suppose you are.

MR. SAYWARD: Your question, then, is, am I arguing from the point of conditions in Massachusetts and that those conditions are different from those existing in Pennsylvania?

MR. HARRIS: Yes.

MR. SAYWARD: Not at all; it has nothing whatever to do with it. But even if that were

the idea, I desire that you should understand that a very large proportion of our contracts are made exactly in the same way that they are in Pennsylvania ; that is, by a general contractor with subcontractors under him, and even if it were not so the same principle holds good. What I really came on the floor to say was that I don't want the opportunity lost in this Convention, when we have gathered representatives of the building interest here from various sections of the country, to show as clearly as possible, through discussion, whether lien-law protection is a good thing or a bad thing for the builder, for the responsible, honest contractor. I suppose that we shall never see the time when conditions in regard to this sort of protection will be exactly the same in all communities ; neither is it conceived that by the appointment of a permanent committee on lien law a standard form of lien law can be evolved, but the idea is rather that a committee shall be created which shall gather from time to time all the information it can, and then, on such occasions as these, transmit it to all the local bodies through the delegates present, in order that we may be benefited by the larger information ; in fact, following out the great principle which is really behind this National Association, **that it is an**

educational institution, and that the builders need to be educated upon every subject that we take up and become better informed than they were before. Now I know for one that the discussions we have already had upon the lien law have made me very much more precise in my knowledge on this matter, and I am satisfied that many others feel the same as I do, and so I want to see the discussion as general as it possibly can be, that others may be benefited, and that we all may have further light. No delegate should conclude that any particular form of lien law is being advocated. We are simply discussing to find out whether we, as builders, should eventually exert our influence in favor of or against such legislation, and it will take us some years to find out. The experience that we have had has shown some of us that it is so extremely difficult to arrange a law of that nature so that its provisions shall be just and fair, and not finally produce a bad effect for the responsible contractor, that we are convinced that the principle itself is bad, that it does not really benefit the responsible contractor. It may protect him occasionally, it may change the conditions of ordinary business, but those of us who believe as I do, contend that the condition produced is not a good business condition, that

it is a false business condition, that it is misleading and therefore that it is bad for the responsible contractor. We believe that it is a bolster and a protection for the man who is not responsible and that it helps to throw upon the market more and more contractors of that character every year, making competition worse and worse. We believe that the principle back of this legislation is not in itself correct, and we hope that the presentation of the arguments, pro and con, at our yearly meetings will finally convince all that the honest builder, the builder who aims to conduct his business upon true business principles (and it is only such that the National Association aims to represent) not only does not need the protection afforded by lien laws, but is seriously injured by their existence.

MR. WOODBURY, of Boston (Proxy for Mr. Miller, of San Francisco): My name was Woodbury, of Boston, when I came here, but I am now a proxy for Mr. Miller, of San Francisco. Mr. President, I would like to have the gentleman from Philadelphia explain a little more fully the practical workings of the lien law. The question came into my mind whether the practical working of that law was equally good for the owners of property as it was for the parties who were furnishing the material that went

into the construction of the building. It struck me that possibly it might work very great disadvantage if the owner was paying for his building. That is a point that was not touched on, which I would like explained a little more fully.

MR. HARRIS, of Philadelphia: I can answer the gentleman if the Convention will bear with me. The law that was passed at the instigation of the Master Builders' Exchange of Philadelphia stated that it would be illegal for an owner and a general contractor to have an agreement between themselves, cutting out the right of any subcontractor without the knowledge and acceptance in writing of the subcontractor. The owner of a building always has something or other to protect him which no other man has that buys—that is, he has a bond from the general contractor, if he chooses to take it. He will not get a bond from the general contractor if he feels that no subcontractor has any lien against him, because he can get his building anyhow; but if he knows that if the contractor does not pay for this building every man that works on it can get a lien, he will be more careful in the selection of the general contractor, because that is his only safety and security. If the general contractor does not pay the subcontractor, under the law of Pennsylvania the

building can be liened and the money recovered. Now, I wanted to say one thing: Gentlemen here have spoken in regard to what I said, and have labored under some misapprehension. I simply got up to speak about the lien law for this reason—I said I hoped to hear discussion on these matters; I did not want to bind anybody in speaking upon the resolution; I did not wish anybody to think that my thoughts were universal truths. I simply want to get the idea of the people around us, and we can take the thoughts that are given out at this meeting and consider them. The thought that was given out at the St. Paul Convention two years ago was the occasion of that law being passed in Pennsylvania. I do not think we would have ever thought of it but simply for the fact of the statement that anybody like mechanics could not secure legislation. The result of our legislation is worth to us to-day over a million of dollars.

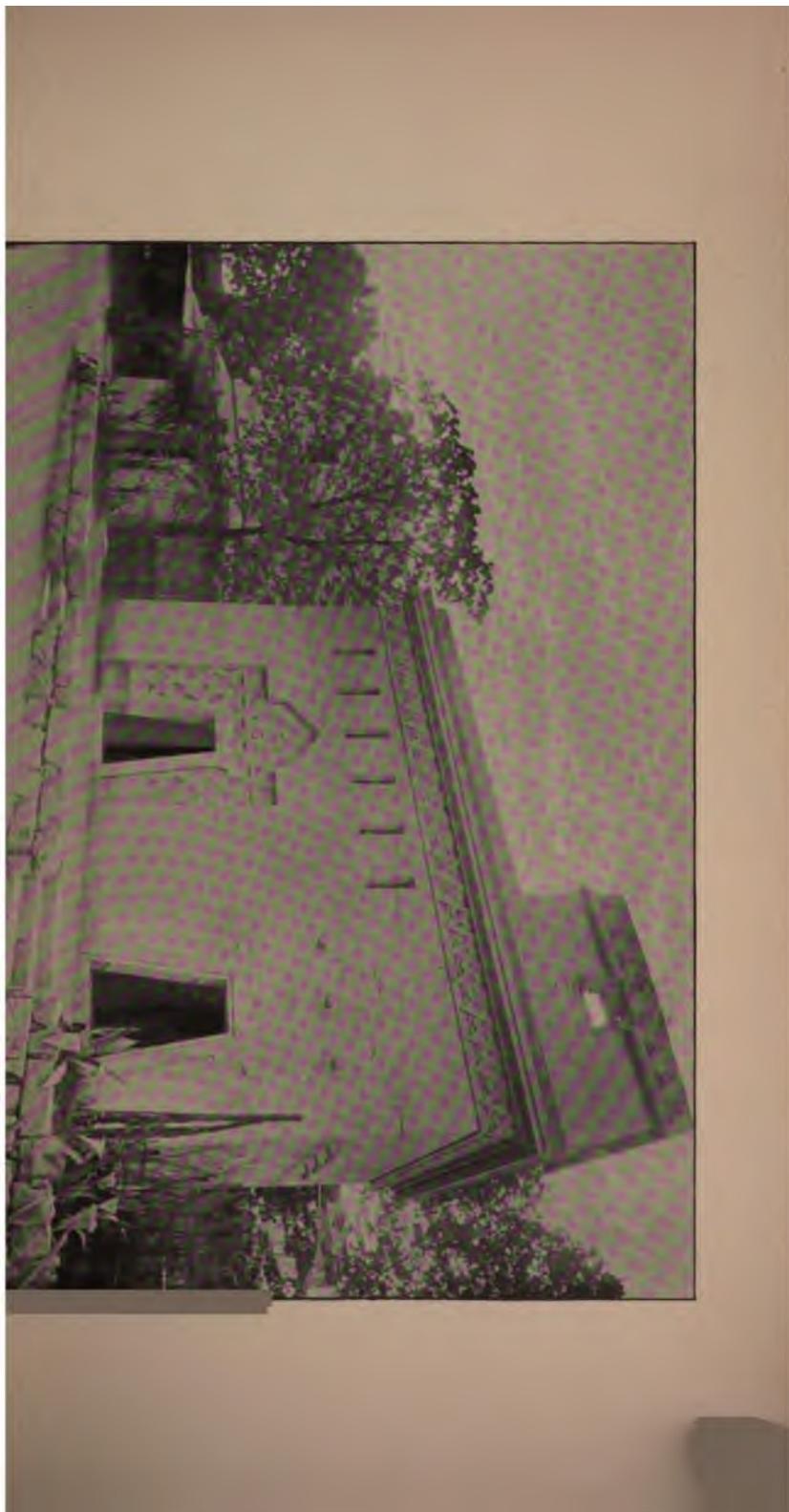
MR. SAYWARD: May I interrogate the gentleman?

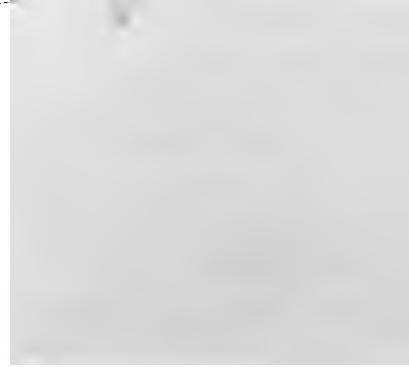
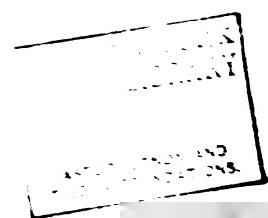
MR. HARRIS: Certainly.

MR. SAYWARD: Then the National Association has been of some benefit to you?

MR. HARRIS: Yes, sir. I always said so.

MR. SAYWARD: A million dollars?





MR. HARRIS : Easily, and you know it.

PRESIDENT McALLISTER: Does your law require an owner to pay again if he has paid once?

MR. HARRIS : Yes, sir.

PRESIDENT McALLISTER: And to keep on paying, no matter how many times he has paid, as long as there is anything due on the building ?

MR. HARRIS : Yes, sir ; it does.

MR. PRUSSING, of Chicago : That is the lien law that we have been looking for.

MR. HARRIS : Yes ; but one moment ; he has a bond to draw upon ; it is not he that pays.

MR. J. E. TWINAME, of Indianapolis : In answer to the question about the owner keeping on paying, the owner can keep on paying until he strikes the right man, can't he ?

MR. HARRIS : That is right. There is one thing you gentlemen must not forget : There isn't a thing delivered in this country that can't be replevined on except the materials that enter into a building ; everything else can be replevined.

MR. BENTLEY, of Milwaukee : I would like to relate my experience in one lien case in Wisconsin. I took a contract to put up a building there for a party that had their plans made outside the State—the plans and the architect were

from Chicago. I undertook this building and completed it on time. The parties for whom it was built, under contract, occupied it on time under a written agreement before the building was started. The architect vacillated as to placing the responsibility for some extras on the owner, who had a superintendent there. The owner tried to fix it on the architect. I waited until the last opportunity and filed a lien on the building, and the case was brought to suit before a jury. There were sixteen points that were to be decided, and every point was decided in our favor. After arguing and fighting this for nearly three weeks in the Superior Court, we were allowed everything that we asked. The great point of the owner was that we hadn't secured our final certificate from the architect; that was their big point, and they even had the audacity to enter a counter claim against us for \$5000 damages because we hadn't put into this building what we agreed to. They took the case to the Supreme Court of Wisconsin; and we were successful there and got our money.

MR. DRAKE, of Grand Rapids: In Grand Rapids we are puzzled with the same difficulties that the gentleman has stated, and consequently they have instructed us specially to get information on this matter. A little o'

the Exchange employed one of the most competent lawyers we have in our State to draft a new lien law, which we presented to the legislature. If we had been fortunate enough, like our friend Mr. Harris, of Pennsylvania, to have met with opposition, we would perhaps have gone to work, but we couldn't find a man that was against it. We placed the bill in one legislator's hands, and he said, "I will see that that passes all right without amendment." They were not looked after much, and we went there on the day it was to pass, and they said, "Gentlemen, your bill has been recommended, and it is going to pass as you wanted it." They passed it the last day they were in session, and we found, instead of not being amended at all, it had been amended so that we were worse off than if we had no law whatever. We expended our money to get that law passed, and trusted to have it passed as we presented it ; and it is worse than nothing to-day, because there is a clause in it that every material man who furnishes any material on a building has to notify the owner within ten days after the contract is made, or there is no way to recover. Now, in regard to the subject of the resolution which is entertained here being referred to a standing committee of six or seven, I think it should be

carried. I brought a copy of that bill which was presented to our legislature, and I would like the privilege of referring that bill to that committee. I would also ask the different associations affiliated with this body if they have any way of getting copies of their bills to send them to that committee also, and that that committee look them over at some future time and see what State, in their opinion, has got the best law. Now, our law is not as good as the Pennsylvania law. All we ask for is that the material men or the subcontractor can recover up to the contract price, but not beyond the contract price, because they can't go beyond the contract. I am afraid that the law of Pennsylvania, if somebody would carry it to the Supreme Court, would probably be overthrown.

MR. HARRIS: I would like to settle that right here. Our bill was drawn by one of the first lawyers of Pennsylvania, and was submitted to the Supreme Court Justices as to whether they thought there was anything in it that anybody could object to, and they decided there was not.

MR. CONRAD BENDER, of Indianapolis: There are many different interests represented in this body—we have the material men, we have the subcontractor and we have the general contractor. While there are different interests, I

have not heard the general contractors speak on this subject. The general contractors have a lien law that they prefer; your material men have a law that they prefer; and perhaps the subcontractors have another law that they prefer. Our Exchange in Indianapolis is divided upon this question; the material men want a lien law such as they have in Pennsylvania—to make a man pay if it bankrupts him—the subcontractors are indifferent, and some of them say don't have any law at all. As a rule, the general contractor is in favor of a lien law by which a man who wishes to supply him must notify the owner to that effect before he tries to sell the material. Now, this gives the owner a chance to protect himself, and it also gives the general contractor a chance to protect himself, thus placing everybody on an equal footing. The material man must notify the owner, and looks to him for the money which is retained out of the contract; and so with the subcontractor. We had a law in Indiana that gave every man a right to take a lien by filing notice within sixty days after the completion of the building. That, I claim, is the law for the material man. This law was enacted in 1883, and in 1886 it was repealed, and the legislature which we now have passed the law which the material man

and the subcontractor seem to be in favor of. I claim that we have come here as a body of men who want to do justice to all sides, and we want a fair law. The way the law was passed in our State was that the material men and the labor union, who had been fighting us for years, got the legislature to pass that law. Our workmen do not need much of a lien law, because they can protect themselves through their union. I would suggest that every material organization, every subcontractors' organization, should get together and agree between themselves, and by that means they would give a responsible man the preference over an irresponsible man. In this way we can improve ourselves and put ourselves on a par with any other business. If I build a man's house under this law it makes it the man's business to see whether I am responsible. If I go to a tailor to buy a suit of clothes the law is entirely different. I don't have to ask him whether he has paid his mill for his work. I think the law goes too far. I think the subcontractor has a law over him which forces me to say: "Have you paid your bills for which according to the law you are responsible? Show me your receipt; furnish me a bond." Gentlemen, it is going too far; it works a hardship equally upon the subcontractor and the general contractor.

MR. WILLIAM B. IRVINE, of Philadelphia: In reply to a question asked by the President as to how long Pennsylvania continued to pay, I want to say that in Pennsylvania the lien law for a number of years has been strictly confined, and that the first contractor and the contractor under the first are the only ones that have had liens until a recent decision of the Supreme Court, which said that where the contract was made with the first contractor no other lien should exist. That the Builders' Exchange of Philadelphia took up, and on that decision went to Harrisburg and asked the law to be put back where it had been standing for eighty-six years. It is true that a lot of lawyers and legislators opposed the law—I have always found that class of people opposed to it—but fortunately for the building trade their capital in trade consists of a box of pens and a quire of paper. Why a man should say that this is not proper legislation I am at a loss to understand. What objection is there to any law that makes a man pay his bills? Does the lien law do any more? No; it simply puts the onus on the owner instead of the material man and the mechanic. He can throw all the safeguards around himself which it may be necessary to have, but the material man and the mechanic cannot possibly

do that without making enemies. The man who pays the money can always protect himself, as far as I have seen.

MR. SAYWARD: I want to ask one question for information. Do I understand that the law of Pennsylvania, as you now have it, protects the general contractor and also all subcontractors who subcontract directly with him, and none others?

MR. IRVINE: The law of Pennsylvania now is just as it has been for eighty-six years, that the first contractor and the first contractor under him only are protected?

MR. SAYWARD: And none others?

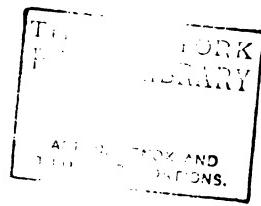
MR. IRVINE: And none others.

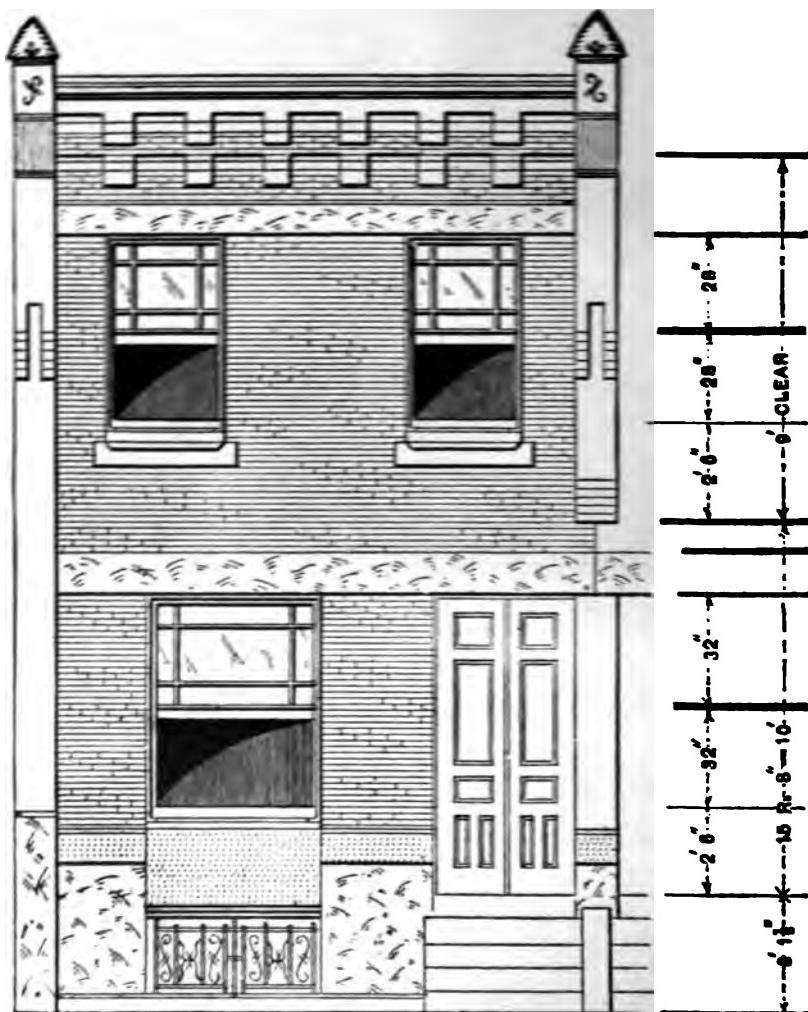
MR. SAYWARD: Is that law fair?

MR. IRVINE: Yes. I have never lost any money by a rogue, but I have lost a tremendous lot by honest fools. If a man I furnish material to is a rogue, I am generally looking out for him.

MR. SAYWARD: To carry the question a little further. The point is to protect the man who honestly furnishes material to go into the building. Why do you stop where you do?

MR. IRVINE: Simply because the judges of the courts have said that the line must be drawn somewhere.



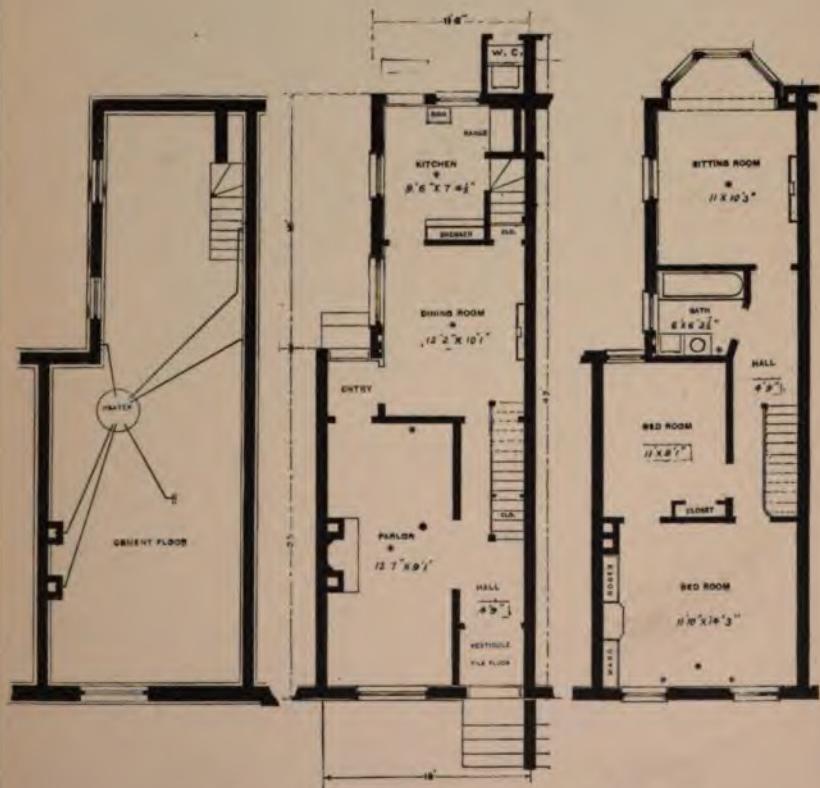


ELEVATION—MODEL PHILADELPHIA HOUSE

For people of moderate means.

WORLD'S COLUMBIAN EXPOSITION, CHICAGO, 1893.

Erected by the Social and Economic Science Committee of the
Ladies' Auxiliary of Philadelphia.



FLOOR PLANS—MODEL PHILADELPHIA HOUSE.

WORLD'S COLUMBIAN EXPOSITION, CHICAGO, 1893.



MR. SAYWARD: That is a confession, then, that the principle is wrong.

MR. IRVINE: It is giving as much protection as it is possible to do.

A DELEGATE: I would like to ask if that is not class legislation ?

PRESIDENT McALLISTER: I am very sorry to cut off this flow of eloquence, but under the order adopted the standard time says 1 o'clock, and we will now take a recess until 2.30. Gentlemen, we have here a communication from the Pittsburg delegation, which will be read after the recess.

The Convention re-assembled at 3 P. M.

PRESIDENT McALLISTER: The Secretary has some announcements to make.

SECRETARY SAYWARD: The Committee on Time and Place and Nomination of Officers are requested to meet at 9.30 o'clock to-morrow morning in the parlor of the Chicago delegation, at the Hotel Hollenden. The Committee on Resolutions are asked to meet immediately after the close of this session at Room 134, Hotel Hollenden.

The following communication has been received :

*To the President and Members of the National Association of Builders
in Convention Assembled at Cleveland, Ohio.*

GENTLEMEN :—At a meeting of the Pittsburg delegates the following action was taken :

Whereas, The Pittsburg Exchange elected eighteen delegates, as allowed by the Constitution of the National Association of Builders, being one delegate for each fifty members in good standing ; and

Whereas, On the presentation of their credentials to the proper committee of the National Association of Builders, a majority of said committee decided that the Pittsburg Exchange is entitled to only four delegates, including the delegates-at-large, and said action of the committee was confirmed by the Convention now in session ; and

Whereas, Though we regret being compelled to take action severing the connection of the Pittsburg Exchange from the National Association, as our heartfelt sympathies are with the Association in its mission and work, yet as we cannot submit to gross injustice, therefore be it

Resolved, That we withdraw, both as delegates and as an Exchange, from the National Association of Builders.

A. J. HARNACK, *Chairman.*

MR. SCRIBNER, of St. Paul : I move that the communication be received and placed on file.

MR. STEVENS, of Philadelphia : I second the motion.

PRESIDENT McALLISTER : You have heard the motion, that the communication from the persons elected as delegates to this Convention from the Pittsburg Exchange be received and placed on file. Are you ready for the question ? All in favor say aye ; opposed, no. The motion is carried.

MR. CURRY : Mr. President, the Master Builders' Association of Lynn received a

communication from the Committee on Lien Law of the National Association asking the following questions :

1. Is the Exchange in favor of a lien law ?
2. If it is, is the present law of your State satisfactory ?
3. If the present law is not satisfactory what changes would you suggest ?

The question created a warm discussion, in which all the members showed a decided interest, and the general opinion was that the present law should be amended so that the lien on material and labor should take precedence of all mortgages, etc., and other modes of cheating the honest builder in vogue in this State at the present time.

The questions asked by your committee created a thorough discussion, in which all the members present took part. The sentiment was that the present law should be amended so that the lien on material and labor—the intention being to make the protection to material the same as that which our State gives to labor—should take precedence of all mortgages, and so forth. We have a bill drafted asking for the repeal of the laws on the statute books of Massachusetts after a certain time, and to have the lien take precedence of all mortgages

raised on a building before the building has left the hands of the man who builds it. Our people in Lynn are interested in this, and I think the replies to our Secretary from seventeen or eighteen organizations out of thirty-four ought to settle the question so far as this Convention is concerned. I believe that if there is any portion of this organization that is suffering in any degree or in any direction, it is our duty to consider it; we are sent here from the different portions of our great republic to take that under consideration. There may be subcontractors and material men who have been shot at all the forenoon; I think they are law-abiding citizens and that they should have protection. We have a certain few that we call general contractors. I am willing to admit that they are built a little differently from the rest of us, but I am not willing to admit that they have any more rights than we, the subcontractors, have. Isn't it time that the man who enters my city with his axe on one shoulder and his coat on the other and goes to an architect's office to figure out a set of plans should be asked who is behind him? He has got nothing behind him. He takes the plans and figures on them, and the lowest character in my city dare not touch that contractor at the figures he gives. Why?

Because his bid is far less than the cost of the completed building, and if we cannot pay one hundred cents on the dollar we don't want the job. But the skin comes in and says, "I will take it." He has no record for anything, only skinning from one place to another, and he comes into my city and gets stuck on the job; he pays ten cents on the dollar and he says, "Nobody knows me nor my record." General Butler once said, "A character was the worst thing a man could have, but if he had one he ought to defend it." That is what we are standing on here. The skin contractor would pay ten cents on the dollar in Lynn, and the next step would probably take him into some new locality, where he could do the same thing. Some men understand that we want a national law passed. We don't want anything of the kind. I will tell you what we do want, or what the majority of the Exchanges have decided after ventilating the subject thoroughly: they have decided that a certain law is the one they want, and they have the right to ask the National Association to help them with all the power it can use. We are not here to ask you to frame a general bill; such a thing could not be done, but we do ask you to help us, in the different States with your power and influence to pass such laws as we

think would be for our benefit. We don't want to interfere with the State of Wisconsin or the State of Pennsylvania or any other State, but we of Massachusetts want a change in our lien law to give protection to material the same as our State now gives to labor, or, in other words all we ask in Massachusetts is that a man who erects a building will pay for the material and labor. Is that honest? Is there anything wrong about that? Is it wrong for me to expect if a man puts up a building in my State, that he will pay for the material and the labor? That is all we ask.

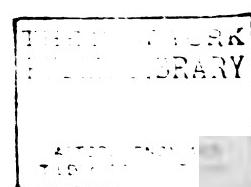
MR. JOHN S. STEVENS, of Philadelphia: Don't you think that this Association would occupy rather an anomalous position if, as a national body, we were to advocate a lien law in a State that wanted a lien law and then to advocate the repeal of it in another State because they didn't want it? I think that the main question to be settled by the delegates is the question whether we ought to have any lien law at all, whether it is right and whether it is proper? Now, you appointed a committee last year to consider that subject. and you are likely to appoint another committee to consider the subject and make it a standing committee. I listened very attentively to the remarks that were made this

morning. There was one delegate who spoke—I forget for the moment the city he represents—but if I remember rightly he said something like this; that it would be the duty of the Committee on Lien Laws to get all the lien laws that had been adopted by the different States, examine them and from them formulate what they considered a just and equitable lien law. Now, I was chairman of the Special Committee on Lien Law and undertook something of that kind myself. I received a book that had probably 300 pages of fine type representing the lien law of one State. I did my best to read it through; I had by my side a pile of books of a similar character; I found that confusion was becoming utterly confounded in attempting to read these varying laws. Why, of all the diversities, they can hardly be expressed, and what to do I didn't know. My head became muddled, and the more I thought about the matter the more I concluded it was an impossibility to do what I had attempted, and the only way would be to get some lawyer from Philadelphia—you know they are the smartest lawyers in the country, the Philadelphia lawyers—to write out the lien law that we have in Pennsylvania and present it to this Convention, and ask it if that wasn't just the lien law we ought to have, or

rather the State of Pennsylvania. Now, I would suggest that the gentleman from Grand Rapids be made chairman of the next committee that is appointed on this matter, and let him undertake that task, and let us see what we shall have at the Convention that meets in St Louis next year. I don't think in the meantime he will attend to any business, and probably not even get a summer vacation. But, after all, gentlemen, is it not the principle of the thing that we want to get at? Is it not the question of whether a lien law is deemed wise by the filial bodies that are associated in this national body. Believing that to be the case, your committee propounded certain questions. We sent out, as our report shows, circulars asking that this question be thoroughly discussed in the different Exchanges, and we present to you here to-day the results of that communication that was sent to them. And what did we find? We found that out of thirty-two of those that were represented in this Convention we received answers from nineteen of them; seventeen of them said yes, we want a lien law; one of them said no, we don't want any lien law, and another one said we are undecided about it, it is a tie vote in our body. Now then, if it is a question, as I believe it is, to know whether we ought to have a lien



PARLOR—MODEL PHILADELPHIA HOUSE.
World's Columbian Exposition, Chicago, 1893.



law or whether we ought not to have one, and that question is to come before this Convention to be decided, it strikes me that it is already decided. If seventeen out of thirty-two say yes, it seems to me that that is a majority. Now, I find upon conversation with some of the gentlemen representing Exchanges in which they voted yes, we want a lien law, that they as individuals do not want it. Then what happens ? The question simply goes back to the Exchanges themselves, and what do the majority of the members of that Exchange want ? When they say to us yes, it implies that a majority of the members of that Exchange want a lien law. When those replies all come in to us, it means that a majority of the filial bodies that compose this association want a lien law. Is that logic, or a conclusion ? Therefore, it seems to me that if we want a lien law we could hardly advocate it in one State and, as the gentleman from New York has asked us, disapprove it in another State. To help this State have its lien laws amended and to help the other State to abolish all lien laws, it seems to me would be occupying rather an odd position. I know, and I know full well how much can be said on both sides of this subject ; I have had it dinned in one ear and dinned in the other ear,

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Mr. Darling has to say, because
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subject.

MR. J. T. DARLING, of Wor
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when we came into this Conv
members of this committee we
on this subject. However, it h
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on this matter, that we should say something. It certainly must strike you with considerable significance, gentlemen, in the first place, that it appeared necessary to this body to appoint a committee to take up this subject. That fact in itself has a significance. It has been said to you in this report that with the exception of one Exchange—I believe only one, if I am not right, I shall stand corrected—there is no Exchange in the United States which is satisfied with the lien law under which it is now operating.

MR. STEVENS, of Philadelphia: There are six of them.

MR. DARLING, of Worcester: Well, I stand corrected. A large majority, seventeen, were not satisfied with their present lien law; that has its significance. If I understand the case aright, the cause which brought about this agitation was the fact of the great dissatisfaction, notwithstanding lien laws, as has been stated to you by the gentleman from Philadelphia, that had stood on their statute books nearly 100 years. That same gentleman told you that this committee, which had been formed by this association, had to all appearances been wrestling with a mountain and had produced a mouse. I felt that his simile was well chosen. But there

are several other suggestive points, which led at least two of your committee, I might say three out of five, to advocate no lien law at all. Now, our reasons are somewhat as follows: We find that in those sections where they are advocating a lien law with the most earnestness their conditions are the lowest, and where they have the most stringent lien laws the conditions of the builder are the lowest and most undesirable. What does that suggest? Now, these are questions which set us to thinking, and I will simply raise these questions in a spirit of fairness to set you to thinking. What does the lien law do, supposing you had one to protect you to the full extent of your desires? There is no question but what, if you could have one drawn just to suit you you would have it to protect every one as nearly alike as possible, but in securing that protection doesn't it secure to you something else? Doesn't it secure to you and secure to the owners a competition which is undesirable? If the conditions as we find them are as we believe them to be, that where the most stringent lien laws exist the conditions of the contractor are the lowest in result, it would mean this: that it has allowed a character of competition which has brought the responsible contractor down to a lower level. It has made

it possible, in the opinion of at least one of your committee, and I think that Brother Stevens almost feels that for himself.

MR. STEVENS : Hold on.

MR. DARLING : It has made it possible for a class of competitors to enter without capital, without credit, and right here, in the State of Ohio, without anything. In your city here, to-day, if I ask a contractor for figures upon plans and specifications for a building costing \$100,000, and the contractor is worth \$100,000, has a reputation for paying his bills, is backed with honesty and honor, known well among his fellows, with a reputation for paying every dollar that he puts himself under the obligation to pay, does he stand any better chance than the man who hasn't a dollar at all ? We say, no ; for this reason : Under your lien law here a man who isn't worth anything can go to the material man, and the material man can deliver his goods on the lot of land where the building is to be built, and he has a right, if I am correctly informed, for several months after the completion of that building—at any time during the erection of the building and for a period lasting several months subsequent thereto—to file a lien on that property. Of what consequence or importance is it to that material man

to have a responsible contractor? The significance to you as builders, if you are responsible men here in Ohio, is this: It makes it possible for an irresponsible man, without capital, without credit, without character, to compete on an equal basis with you. There is this, of which I am satisfied, that where the lien laws at the present time are the most effective, where they go into detail the most, the conditions of the builders are lowest and the most undesirable. With an experience on our own part, extending into several States, we find that to be the case. I think that in Massachusetts we have the weakest lien law there is in any State, so far as I have been able to investigate, and I believe that in Massachusetts the conditions are the best in support of the responsible contractor, and after all this investigation which we have gone through with, extending over a period of at least eight months, I have come to the firm conviction that we should rely upon something besides the protection afforded by the treacherous lien law to enable us to further our operations as builders and contractors. A man going into the market, offering his bid, should first look carefully to whom he is submitting that bid, accepting the responsible bidder in preference to the irresponsible bidder. He

should first desire to know whether the man to whom he is submitting a proposal is going to pay the bill or whether he must depend upon the lien law, and when you do that, gentlemen, you will do something toward strengthening the condition of the builders of this country, and it will operate as a check against the irresponsible bidder. As it appears to me, the lien law acts as a prohibition to the operations of the responsible bidder, and it offers special inducements to the irresponsible bidder, whether he be a general contractor, a mason, a carpenter, or what not, and I am satisfied, so far as my investigations have gone, that the operations of the lien laws of the various States of the country to-day are injurious to the interests of the honest contractor.

MR. HARRIS, of Philadelphia: I occupy the anomalous position of a general contractor and a subcontractor who never had occasion to put a lien on a building in my life. I have been fortunate. I never worked a day's journey work in my life. My master, when I fulfilled my term and after I came back from the war, took me into business with him, or he would have lost me. Consequently, I think if there is any man on this floor who can speak in favor of a lien law, I am that individual, because it

doesn't interest me one particle in business for forty years, occasion to file a lien. When house I am living in now, I got alarm, and two years after my wife is no use keeping that in the "Why?" She said, "No but But next door a burglar got it aroused them. You don't know you may want this lien law. law to be called class legislation law to be called a law to collect. We are not asking for class legislation asking to be put upon the back citizen of the United States, any entitled to it. Let a dry goods store give anybody a roll of goods, and doesn't pay for it, the seller can replevin it and take it away. in a building, and there is nothing enable you to get it; if a man goes into bankruptcy his creditors will get it. I have particular attention to the unequal treatment of the men that are represented changes here. You will find that is made officially that seven voted in favor of the lien law, one of those men got up and



DINING-ROOM—MODEL PHILADELPHIA HOUSE.
World's Columbian Exposition, Chicago, 1893.



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law, and with a generosity and an integrity unexampled, and only found in connection with American institutions, they get up and say, "Our Exchanges are in favor of it, but we personally are opposed to it." Where would you find a set of men like that? I have never before seen such a set of men, and I have been in a great many Conventions.

PRESIDENT McALLISTER: The regular order of business will now be taken up, and the next in order is the reports from filial bodies.

SECRETARY SAYWARD: Philadelphia.

MR. GEORGE WATSON, of Philadelphia:

CLEVELAND, OHIO, January 19, 1892.

*To the President, Officers and Members of the Sixth Annual Convention
of The National Association of Builders.*

GENTLEMEN:—The Master Builders' Exchange of Philadelphia respectfully reports that during the past year the membership of the Exchange has been kept up to its usual number, being at the present time 290. The financial statement of the Finance Committee and Treasurer shows that our certificates of membership originally costing \$200 are now worth \$388. The following improvements have been made during the year, to wit: Additional story on front building (to be used as a public restaurant) costing over \$10,000. The enlargement of the exhibition room, and the beautifying of our meeting room with paneled steel ceiling, handsome book cases, and caps and bases to columns, making it one of the handsomest Exchange rooms in the country. Our Trade School has been well attended by a number of intelligent boys and is attracting much public attention, and we feel encouraged to continue in our good work. Our Legislative Committee have succeeded, after much labor and expense, in restoring the lien law of 1806 to its former status. One of our prominent railroads

withdrew the assistance of our Exchange to prevent the passage by the Pennsylvania Legislature of the Personal Liability Bill, and our committee now have under consideration, in conference with the Chairman of the Property Committee of the Board of Education, the awarding of contracts for the erection of public-school buildings. Our Complaint Committee have acted upon two cases referred to them, and they have been amicably settled. Our Committee on Labor had one case before them which was fully investigated, and was amicably disposed of. Our Committee on Press, Printing, Books and Tracts, Historical Exhibition, Mechanical Trade Schools and Entertainment, have all performed the duties assigned them, with great satisfaction to the Board of Directors and members. Our Board have recommended that subjects emanating from the National Association be taken up at our conference meetings of all members of the Exchange, when a light lunch and cigars are to be provided. We have elected to honorary membership in our Exchange Col. R. T. Auchmuty, of New York, who made a handsome donation to our Trade School, and Dr. E. H. Williams, of Philadelphia, who presented the exhibition department of our Exchange with a costly model of a Japanese Temple, and we intend having the portrait of Col. R. T. Auchmuty placed upon our walls.

The Exchange is not so well attended during 'Change hour as we would like it to be. Every effort is being made to increase the attendance. We are of the opinion that the Master Builders' Exchange of Philadelphia is well recognized as a power in Philadelphia, being called in frequently to assist the authorities in shaping and carrying out projects upon various boards, etc.

Mr. Wickings has without doubt been of great benefit in placing the architect in that position in society to which he is entitled.

Very respectfully submitted,

GEORGE WATSON, *President.*

WM. HARKNESS, *Secretary.*

Mr. President, as the National Association honored the Philadelphia Exchange by visiting it, we make the visit a part of the proceedings

of the last National Convention, and designating it as a model Exchange, and as its history is part of the literature of this Association, we felt that it would not be necessary to give anything more than a brief *r  sum  * of our doings. You all know the birth and life of the Philadelphia Exchange by the report we made at the last meeting of the National Association, but I have listened carefully to the different reports, and have been much interested in the proceedings of the different Exchanges, but I have been disappointed not to find a single word mentioned of a trade school. The National Association last year visited Philadelphia, and from the satisfaction expressed, and from the determination of many of the members of filial bodies, I was sure that there would be a half a dozen of them this year, but there is not a single one. Col. Auchmuty has generously helped us and been the life of our Trade School, because it was through his generous attention that it was started. I had hoped that Mr. Ittner, of St. Louis, who was very much interested, would have instituted one in St. Louis, but it hasn't been done. Our experience has been that it is hard work, and that it is necessary to give your time and attention to it, for it is the only way in which American boys can learn trades and

the only way in which we can have American mechanics.

Our experience has been that the boys in our Trade Schools for one year have been taken into the carpenter's trade particularly, and out of the large classes we have had but three remain out of places; they have been taken by the master builders of Philadelphia and the master carpenters, and in many instances have proved superior to many of the workmen that we have to hire. It only requires determination to do it. You may be antagonized by labor unions, but we have not found it so. Our bricklaying class is not as large as it was last year, but the journeymen bricklayers of Philadelphia have asked us to meet them in conference, and I have no doubt before a month passes over they will adopt a mode of registering, making it necessary to become a registered apprentice in their trade. that they must come from the Master Builders' Trade Schools. That is a great deal for the Journeymen Bricklayers' Association, for it is a very powerful one in Philadelphia.

I only want to say, Mr. President, that I hope at the next session our schools will be more prosperous than they are and that half a dozen other Exchanges may report that they have flourishing trade schools. Invitations have been

given to the different members of the filial bodies that they will be welcome in the different cities. I want to say that Philadelphia's latch-string is always out, and we have a committee, of which our genial friend, Mr. Harris, is chairman, that always takes care of the members of filial bodies, and we are in close association with the authorities of Philadelphia, and I will guarantee that a member of a filial body from another association coming to Philadelphia can go away unmolested.

MR. CONRAD BENDER, of Indianapolis: I move you that this Association extend a vote of thanks to Col. Richard T. Auchmuty for the generous manner in which he treated the Philadelphia Exchange.

MR. SCRIBNER, of St. Paul: I second the motion.

PRESIDENT MCALLISTER: Those in favor will say aye; opposed, no. Carried.

"Humanity" was the word that brought every member of the Exchange to a special meeting held on February 19, 1892. Thousands of men, women and children were starving in Russia, and good people in America were forwarding all manner of goods for their relief to the Eastern seaports, where vessels were being loaded with food and clothing for the sufferers.

As usual, Philadelphia was the first to respond. Hon. Edwin S. Stuart, mayor of the city, organized a General Committee to collect subscriptions and to forward the goods. A member of this committee, Mr. Thomas Martindale addressed the Exchange, on the subject, and ere the last words of his speech had died away the builders of Philadelphia had pledged themselves to pay \$1000 into the fund, and \$550 of the amount was subscribed then and there. To avoid any delay Treasurer Reeves was directed to send his check for \$1000 to the mayor at once, which he did. The individual members returned the entire amount to the Exchange and sixty-two dollars more, which sum was also forwarded to his Honor. The \$1062 thus contributed helped to pay for the goods forwarded to Libau, Russia, on the steamer Indiana, Captain Sargent, hence February 22. In the issue of February 23, 1892, *The Philadelphia Record* said:

The Indiana, laden down with 3300 tons of flour and provisions, is breasting the great waves of the Atlantic. Forty-two hundred miles away across the waters lies the little seaport of Libau, upon the shores of the Baltic. Wind and wave, fog and ice may imperil the good ship upon her voyage of mercy, may at least delay, but not if the prayers of a great city rising from a

million hearts can prevail over gale and tide. At the Washington avenue wharves yesterday afternoon occurred a scene seldom beheld in a century, a spectacle of inspiring and touching humanity, a whole river-front of wharves crowded and surging with an immense populace gathered to cheer the vessel, consecrated to an errand of relief and compassion to far-distant and far-different fellowmen, as she swung out of port, and with cheers and blowing of whistles, joyful waving of handkerchiefs and firing of salutes, and even with silent hearts and tears to wish her a fervent, grand Godspeed.

As early as 9.30 o'clock yesterday morning the Indiana had come up the Delaware from Girard Point and made fast at her pier at the Washington avenue wharves, where, after loading one carload of flour, the hatches were caulked. Already a large throng had gathered there to give her welcome, and cheers went up as she threw out her hawsers. Thousands, however, were waiting impatiently for noon, and long before the appointed hour of two the great public was pushing its way along every adjacent thoroughfare to the scene of the Indiana's sailing. White-haired men and women, as well as youth and beauty could be seen intently journeying towards the many southern wharves

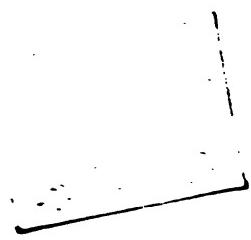
along the river. The rear platforms of southbound street cars were so freighted down with crushed humanity that some of them seemed to be bowling along slowly upon their hind wheels. When the Indiana pulled out into the stream the southern wharves were black with people, house-tops had been pre-empted, tug-boats were tooting and pirouetting in the river, and even many sight-seers had climbed to convenient seats and stations in the tall masts of the vessels lying in port.

Captain Sargent's cheery, bluff countenance beamed delightedly upon all who enjoyed the gratification of stepping foot aboard the stalwart steamer before her farewell. "Good-by," exclaimed one after another, shaking the commander's great fist, "and God bless you. Certainly for an agent, through whom Providence is to manifest itself, a keener-eyed, sturdier officer than Captain Sargent could not have been found."

The Indiana lay alongside both Pier 53 and Pier 54, her bow touching at the latter, her stern at the former. She was gayly decorated with flaunting pennons of all nations, fluttering from stem to stern along and above her masts. The Stars and Stripes flapped to the breeze from the stern, while from the mizzenmast over al-



SETTING ROOM—MOTEL, PHILADELPHIA HOUSE



the loved flag of the city of Philadelphia unfolded itself to the sky. The Russian flag and the Red Cross burgee were both there, too.

The First Regiment Band had taken up its location on Pier 54, and with the German Societies' male chorus of 120 voices, under C. C. Hartman, entertained the general public with music and song. Superintendent Robert J. Linden and Captain Charles B. Edgar, with 150 police officers, preserved perfect order among the gathering upon this and the neighboring pier. Here, shortly after the arrival of the police-tug Stokley alongside the Indiana, bringing Mayor Edwin S. Stuart and party aboard, word was passed through the assemblage that the farewell addresses would be made in the company's warehouse, the crowd preventing the exercises being held upon the deck of the Indiana. An improvised platform had been constructed upon a pile of boxes and barrels, and around these fully 400 persons stood and listened to the brief five-minute addresses. It was a little after two o'clock when the chorus of twelve voices, under the leadership of William Fischer, had finished the first song, and Chairman Francis B. Reeves introduced Rev. Ozi W. Whitaker, Protestant Episcopal Bishop of the Diocese of Pennsylvania.

"The occasion of our a
declared, "is unique. Ships sa
for foreign ports every day.
sails, not for gain, pleasure or
charity, to bear relief to a peo
different language, of a differ
'Thou shalt love thy neighbor
a natural instinct of the hum
praised the Athenians above a
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is something in man's nature tha
selfishness of race or country.
wrote 'I am a man; nothing
man but that affects me,' his
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voices are deeds, religious de
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and to bind the hearts of men.
Indiana and bring her safe to p
"The Indiana," stated Rev
Wayland, "sails out on a cours

parallel. Our relief, generous as it is, is but a mite compared to the distress to which it shall minister. As the Indiana pulls out amid cheers and good wishes, sails over the sea, under the guns of Elsinore and through the Baltic, everywhere she will carry the broad spirit of humanity overlooking race, creed and nation. May the cargo be distributed justly in this same spirit. If anyone seek to withhold from the widow and orphan, I pray God to wither his arm in the socket. All men are trustees each for the other. Our broad fields and bountiful harvests are not for ourselves alone. May He who holds the winds in His hand save the ship from all peril, keep every rope strong as steel, and may the crew, returning from a successful mission, ever after recall with pride that they sailed on the Indiana's great, good voyage in the year of the famine!"

The chorus sang the Russian National Hymn, a majestic composition, which, in view of the occasion, impressed the audience deeply. Archbishop Patrick J. Ryan, of the Roman Catholic Church, spoke feelingly in his address which followed.

"This has been termed a unique occasion," he said. "It is a touching and beautiful one. Over the charity-freighted ship will float that

showing of a mighty power which brings prosperity besides suffering, the Red Cross, made possible the blood of our great Deliverer. We, the young men, come together on this platform, for this is the platform of humanity. We stand together, all of us, to-day, as fellow-men. Fallen as it is, there is still much that is beautiful and self-sacrificing in humanity. We are Americans, on the birthday of the nation, Americans. What more suitable oblation could we offer to the most high God to-day than to believe these children of a common Father - God bless the ship and favored crew, and the day as precious as gold to the heart of every starving. I bear no love for Russia personally, and yet it touched me to hear this Russian hymn, for the first time sung by Americans. Misfortune unites us all. Pray for the Russians, that they may rule better the world. When the Russians behold the ship of freedom, let them look, and see its highest emblem. They will ask: "Whose generosity has saved the waters?" And they will answer, "The name and the spirit have been born in Philadelphia, City of Brotherly Love."

"When we send out ironclads," declared Rev. Dr. Charles Ward, "we find for them fearful names, such as 'Conqueror' and 'Irresistible.'

But this good merchant-ship without a gun is the true conqueror. Not all the combined powers of Europe can delay her a minute upon her voyage of mercy to pour a broadside of love into Russia."

Miss Suelke, of St. Stephen's Church choir, sang the beautiful melody of Francis S. Key, the "Star Spangled Banner," in a clear, sympathetic soprano, which awakened to its utmost the patriotism and enthusiasm of all, and at the close of the hymn a storm of applause repaid the sweet singer. Everybody had been impelled to join in the concluding chorus.

"Divine charity, king of all laws," said Bishop Cyrus D. Foss, "brings us together. The American engineer who planned the railway system of Russia was excused by the Czar for the unpardonable crime of sitting in that sovereign's presence, because 'he was a king.' Surely, now, the Czar will exclaim: 'Kings of charity are those ballot-casting Americans.' A line from Detroit to Savannah, including fifteen States and 27,000,000 of people, is the famine-stricken region of Russia. Our land is the granary of the world. Let us say to Russia, 'Take this. Others will follow.' The Great Eastern crossed the ocean, letting down to its peaceful bed the first Atlantic cable. This ship

will spin out an invisible flame
cord which shall by and by bin
together in fraternity and peace
good ship Indiana!"

"America," said Dr. Marc teaching an object lesson. She seed-grains of liberty, inscribed: all one Father? Has not one G I have a special message to intru ship: 'Tell our persecuted br world is not all cloud and dark bright spot on this globe, where son of humanity is taught, whe message of the fatherhood of brotherhood of man has become and inspirited with soul.'

"Go forth, gallant Indiana, and Stripes, carry the bread of cheer to all sufferers! God be

Every voice was lifted heartil of "America," and thus the But the final Godspeed yet rema Everybody crowded to the wha the eye could reached up and the piers were black with the the bridge of the steamer stood The crew were stationed about pennons and flags overhead sto

in the stiff breeze. The white smoke was curling lazily from the steamer's pipes. Many hurried aboard her for the last time. About 3.30 the whistle was blown. Spectators hurried ashore. Orders were shouted fore and aft. The gangway was hauled upon the wharf. The sailors began loosening the hawsers.

Suddenly a dozen tugs steamed out into the river. The hawsers were cast off and the great vessel began slowly to move out from her moorings. "She is off," shouted one particularly bold onlooker. "Hurrah! Hurrah!" Cheer after cheer arose. The deep-throated multitude took up the cry. Handkerchiefs waved, hats flourished in the air. Pier after pier the crowds took up the shout. The tugs whistled and blew deafening blasts. Steamers and factories gave shrill salutes. Great clouds of smoke arose from the Indiana's smokestack. Guns boomed from many quarters. A scene of remarkable din and enthusiasm began. The hundred thousand spectators all along the river front passed the cheers and the excitement from wharf to wharf. The piers thronged with people, the river noisy with tugs, the waving handkerchiefs, the storm of cheers, the flags and pennons fluttering in the wind, the waters tossing under the western sunlight all conspired to give the Indiana an ever-memorable Godspeed.

the night fully 75,000
people stayed for hours
in the darkness. The master was not so
kind. In Hawaii he swung out
of his available spot alone.
The men were not ordinarily
so bold and mortal with char-
acteristics benumbed.

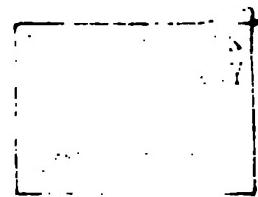
He turned to League Island
and the spectators.

At the sight was a rema-
inder. The gun is failed to chill the
breasts. The intense in-
tensity is noble deed of char-
acteristics thrill every breast.

As a child merely saw an
old man decked with the flags of the n-



CHAMBER—MODEL PHILADELPHIA HOUSE.



The fact that her great hull sank deeply in the water, laden with life-saving provisions for a suffering race of fellow-men, aroused a sentiment of charity in the breast of the multitude. This, coupled with a local pride in realizing that the City of Brotherly Love was stretching forth a helping hand where help is so sorely needed, was after all the incentive to an exhibition of enthusiasm which has probably never been equaled in Philadelphia.

It was just 3.37 when, the exercises having been concluded and the decks of the Indiana cleared, the last line was cast off. Attached to the stern of the steamer were the tugs New Castle and Mary Louise. As their tow lines became taut the prow of the Indiana swung round. When the big ship had reached mid-stream the tow lines were cast off, and, with the police-tugs King and Stokley on either side and the harbor master's launch leading the van, the relief ship was at last on her way.

The trip down the river was full of incident. As the big vessel sped along the crowds on the shore cheered lustily. Every wharf and pier was black, housetops were crowded, and even the rigging of sailing vessels lying in the docks was thronged with venturesome men and boys. All the tugs were gayly decorated, and many

of their numbered partners turned. The ladies in answering salutes from demonstrations from the side by side sped the conorts past the great Greenwich Point and arc. At the Silver Lake boated and a salute was fired. An answering sal Indiana's big whistle, and water came a shout from throats Gloucester's she with people.

At 4:30 o'clock, just Stokley containing the X men down with a party King followed the wall crossing, as the other ship, the big steamer As

On board the Stokley were Mayor Edwin S. Stuart, Director and Mrs. Abraham M. Beitler, General Daniel H. and Mrs. Hastings, Major William H. Hasting, George W. Banks, Anthony J. Drexel, Jr., John R. Drexel, Robert R. Corson, William M. Smith, John Mundell, Mrs. H. W. Cooke, Charles N. Mann, Mrs. Brotherton, of Chicago, and Lewis M. Beitler. The tug King was occupied exclusively by newspaper men.

On February 23, 1892, it was agreed that any contractor who failed to pay his subcontractors would be debarred from bidding on school-work by the Board of Education of the City of Philadelphia. This understanding was with Mr. Paul Kavanagh, representing the Board of Education.

A splendid display of architectural drawings was opened to the public on March 21 and was continued until March 31, when a delegation of business men and journalists from Buffalo, N. Y., visited Philadelphia as guests of the Reading Railroad system. The party, including about 250 representative citizens of New York State and Philadelphia, visited the Master Builders' Exchange on that day and were given a royal reception by the men who build up the city of homes. Murrell Dobbins, President, and David A. Woelpper, Chairman, of the Entertainment Committee, received them in the big meeting

room on the second floor, where Mr. Dobbin made the following address of welcome:

The Master Builders' Exchange of Philadelphia extends to this delegation of business men from Buffalo and their friends a hearty and cordial welcome here to-day. For that matter we are always pleased to extend the hospitality and freedom of this Exchange to such a representative body of visitors to our city.

The objects of this corporation, as declared in our charter, are the encouragement and protection of the building interests in the city and county of Philadelphia, to inculcate just and equitable principles, establish and maintain uniformity in commercial usages, acquire, preserve and disseminate valuable business information and adjust, as far as practicable, the controversies and misunderstandings which are apt to arise between individuals engaged in trade when they have no acknowledged rules to guide them to the end that membership in this corporation may be an assurance to the public of skill, honorable reputation and probity.

While our Exchange is only five years old we feel well satisfied with the success it has attained, and we are proud of this our home. We have a membership of about 300 individual and firms, representing over 600 master

mechanics engaged exclusively in the erection of buildings and manufacture of building materials.

We have also a mechanical trade school connected with this Exchange, where we are teaching boys and young men the various trades connected with the building interests. Our Exhibition Department on the first floor will, no doubt, speak for itself to those of you who have taken the time to examine it, and I hope all the gentlemen present who have not done so will devote some time to it before leaving the city.

At the meeting of our National Association of Builders, held in Cleveland a few months ago, we had the pleasure of meeting quite a number of the members of the Builders' Exchange from your city, and we are glad to know that they are building for themselves an Exchange of their own that will not only be an ornament to your city but a credit to the Exchange.

An elaborate luncheon was served in the new banquet room of the Exchange on the fourth floor, and then Chairman Woelpper made a happy speech followed by John N. Schatcherd, President of the Buffalo Commercial Exchange; O. P. Letchworth, of Buffalo; John S. Stevens, ex-President of the Master Builders' Exchange;

Joel Cook, President of the Board of Port Wardens, who was given an ovation, and who said among other things: "We want the vote of every member of Congress from Western New York in support of the bill giving to the city of Philadelphia a new mint."

"You shall have it," came as from one voice from the Buffalonians.

The advantages which the Builders' Exchange offer to the citizens of Philadelphia and the trades associated with building were fully shown and explained by the members, among whom were Jacob R. Garber, Walter T. Bradley, James Johnston, E. F. Morse, William W. Stevens, William Harkness, Jr., Richard H. Watson, Adolphus G. Buvinger, William B. Carlile, Peter Gray, Charles Gillingham, Charles H. Hayes, Samuel Hart, Joseph E. Brown, William S. Shields, Jacob Myers, Francis F. Black, John Atkinson, George Watson, J. Stein Thorn, Paul F. Milleritz, William H. Albertson, Charles C. Watson, Franklin M. Harris, John Kister, Charles P. Bancroft, Allen B. Barber, John F. Evans, William B. Irvine, John S. Stevens and Stacy Reeves.

The session at the Builders' Exchange over, the visitors were left to enjoy themselves. The evening passed with the exception of the news-

BUILDERS' EXCHANGE CAFÉ.





paper representatives, visited the offices of the Reading Railroad, and there were received by President Archibald A. McLeod and his staff.

The apprenticeship system and the Master Builders' Mechanical Trade Schools were discussed at great length on April 26, 1892, when it was decided that the Exchange would support the schools. The work accomplished by the pupils was reviewed by George Watson, and his plea for the schools was ably seconded by Franklin M. Harris, William S. P. Shields, James C. Taylor, Maurice Joy, Francis F. Black, Edward M. Willard, J. Turley Allen, Colonel William Harrison, James Whitesides, Stacy Reeves, William B. Irvine and President Dobbins. Messrs. Shields and Harris made most eloquent addresses on behalf of the boys, and the action of the meeting was due largely to their efforts.

Several valuable and historical drawings of Philadelphia were offered to the Exchange by Architect Frederick G. Thorn, and, being accepted by the Historical Committee, they were given place on the walls of the Exchange Room.

On September 27, 1892, President Dobbins appointed David A. Woelpper, John S. Stevens, George Watson, Franklin M. Harris and Stacy Reeves a committee to take charge of all matters pertaining to the Columbian Exposition in which the Exchange might be interested.

On November 22, 1892, the Committee on Trade Schools reported that the following contributions had been received for the support of the institution: Bricklayers' Company, \$100; Carpenters' Company, \$200, and Carpenters' and Builders' Association, \$100. It was agreed that a class in Tinsmithing should be added to the schools to replace the Plastering class, which had been abandoned.

The following Code of Practice for subestimating and subcontracting was adopted at this meeting:

RULE 1. A principal contractor having been awarded a contract involving subcontracts, his estimate having been based upon subestimates, should award the said subcontracts to the lowest solicited bidders whose bids were received by him prior to his having made out his own bid, and should notify the subbidders that their estimates have been accepted or rejected as soon as the contract has been awarded to him; and should, without unnecessary delay, execute with the lowest solicited bidders such contracts as may be mutually satisfactory; promptness upon the part of the principal contractor in notifying the subbidders of the acceptance of their bids and the executing of these contracts being essential to the proper compliance of this rule. Should

a principal contractor receive a subbid unsolicited he should not be considered under obligation to use the said bid, even if it be the lowest ; but he must not reveal the bid, nor use it in any way to influence any other party.

RULE 2. Any subbid knowingly opened by a principal contractor should be, for the purpose of this article, considered as having been solicited. A subbid should always be treated by the principal contractor as a confidential communication, and should not be disclosed until after the award of the contract to the principal contractor ; but principal contractors knowingly receiving the bids of subbidders must treat them as solicited bids.

RULE 3. Subcontractors must enclose their bids in envelopes with their names and addresses printed upon them, and the words "Estimate for " written on outside of envelope, and should address and deliver such envelopes to the principal contractors at their places of business.

RULE 4. When bids are submitted to the architect or to the owner for portions of building work which have been reserved, they should be considered as direct estimates only.

RULE 5. Contractors should decline to give architects or owners estimates in the aggregate,

when the said architects or owners are soliciting estimates in detail, nor should estimates be furnished in detail when estimates are solicited in the aggregate.

RULE 6. Payments should be made by the principal contractor to the subcontractors on account as the work progresses, final payment to be made within thirty days after the subcontractor's work is completed and accepted by the principal contractor, or reasons given for the rejection of the same, and should not be delayed until the entire building is completed.

RULE 7. Any one detected in trading on any of the subbids, whether they be solicited or unsolicited, or however knowledge of them may have come into his possession, should be liable to forfeiture of membership, censure, or suspension, as the Exchange may direct.

RULE 8. A principal contractor having obtained work upon bids received from subcontractors has received from those subcontractors valuable considerations for which proper remuneration should be given: the proper remuneration being the awarding to said subcontractors of their respective subcontracts (as provided in Rule 1), and the damage to the subcontractors in failure of the principal contractor to make such awards should be estimated at the liqui-

dated damages of ten per cent. of the amount of their respective bids; the payment of these damages by the principal contractor not necessarily to relieve him from being disciplined by the Exchange for dishonorable conduct.

RULE 9. Any member having work to let should, as far as consistent with business principles, deal only with members of his own or an affiliated Exchange of the National Association, and should do all in his power to forward their interest.

RULE 10. Any member of this Exchange who shall be guilty of unfair, dishonest or unbusinesslike conduct in the transaction of any business, either in competition for work or material, or refusal to comply with a contract, according to the terms thereof, or by declining to enter into a contract after the same has been awarded to him, shall be deemed guilty of a violation of the rules of the Exchange, and if after a fair trial he shall be so adjudged, he shall be liable to suspension or expulsion.

RULE 11. To bring this Code of Practice to the attention of those interested, and to prevent it from being forgotten or its rules overlooked, a copy shall be mailed to each member of the Exchange; other copies shall also be printed in large type and posted upon the walls of the

Charles Gillingham, Charles H. Hastings, Jr., Thomas E. Hartness, Jr., Thomas H. Rector, Mr. John F. Powers, Mr. Charles E. Parker, Frederick Black and Richard C. Black. The delegates and alternate delegates to attend the annual Convention of the American Association of Builders to be held in New York during February 14 were: F. W. Atkinson, Bernard H. Watson, William B. Atkinson, William B. Irvine, David A. Vining, George Watson, William E. Dobbins, James A. Wetter, Marcell Dobbins, Mrs. William Harkness, Jr., William Harkness, Charles Gillingham, John Atkinson, and E. Hastings, John Conway, Allen C. Moore and William Conway. This meeting will bring the most prominent

In Memoriam.

1892.

THOMAS H. DOAN,

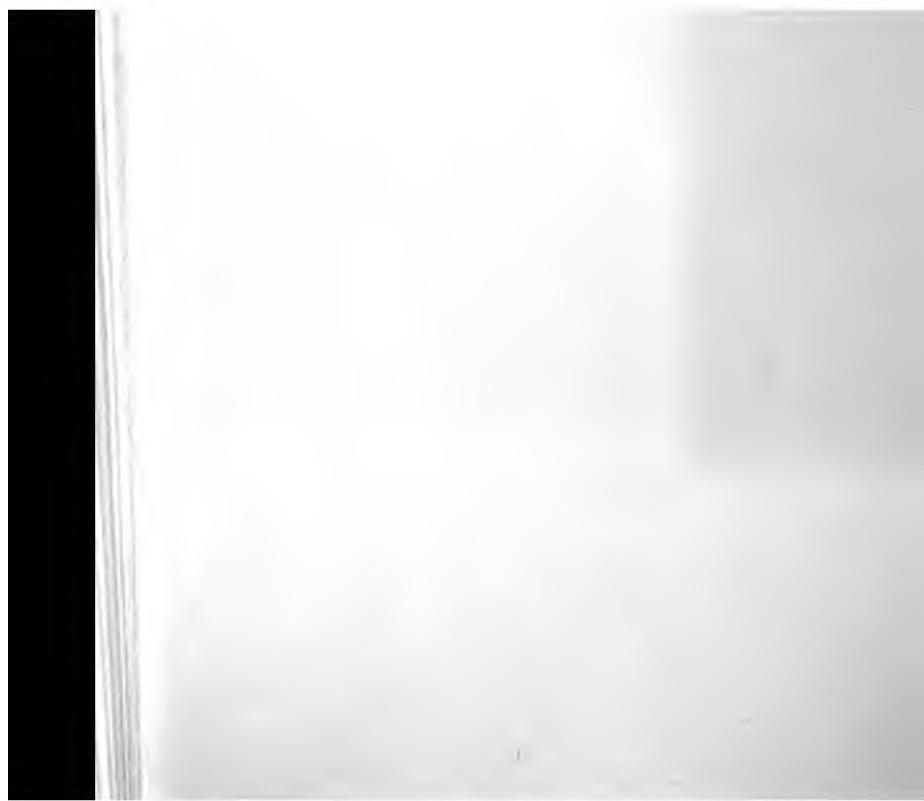
June 14th.

JAMES MOORMAN,

October 5th.

ASTOR-HENDRICKS
TILDEEN FOUNDATIONS

APPENDIX.



**INTERESTING STATISTICS
RELATING TO THE
BUILDING AND REALTY INTERESTS
OF PHILADELPHIA.**

In twenty-two years Philadelphians have spent over \$300,000,000 for new buildings and alterations to old ones. The following comprehensive table shows how the growth has been evenly distributed throughout the decade, and it is the first publication of the only available statistics, some of which are necessarily incomplete:

	New Buildings.	Estimated Cost.	Alter- ations.	Estimated Cost.
1871	6,206	\$15,972,000	1,054	\$421,471
1872	5,301	11,662,207	605	243,877
1873	5,221	11,486,275	1,333	536,784
1874	5,040	12,088,379	1,437	479,876
1875	5,233	14,512,781	1,515	607,722
1876	4,115	10,154,628	1,265	506,800
1877	4,818	9,879,948	1,460	584,727
1878	2,907	6,595,422	1,371	566,228
1879	1,991	4,387,694	1,597	658,517
1880	1,929	4,722,866	1,392	582,421
1881	2,761	6,878,916	1,489	511,183
1882	2,930	7,103,210	1,427	648,873
1883	4,390	10,004,719	1,586	721,512
1884	4,938	11,217,614	1,524	513,827
1885	6,326	13,929,274	1,638	964,728
1886	7,561	16,821,516	1,639	827,445
1887	7,695	17,112,129	1,309	528,100
1888	8,387	18,442,561	1,471	574,638
1889	10,122	22,769,848	1,646	924,916
1890	10,287	23,490,419	1,811	1,224,317
1891	6,738	24,115,870	2,297	3,445,500
1892	7,985	24,268,636	2,416	2,558,223
Totals	122,881	\$297,616,912	33,262	\$18,631,685

The matchless beauty and the exceptional utility of the many imposing edifices fronting upon the main thoroughfares of Philadelphia reflect great credit upon the designers and the builders. Philadelphia architects are rated with the world's best, and no city has so many expert builders. Of course, the greatest of their work is the City Hall, an edifice unequalled in America. The Post Office, The Philadelphia Bourse, Penn Mutual and City Trust Buildings, adjoining each other on the north side of Chestnut Street, between Ninth and Tenth Streets, will each of them, compare with any similar structures in the country. The Art Club is one of the few modern buildings in the United States conceded to be an architecturally perfect. Pictures of it have been printed in nearly every architectural journal of the world. The Masonic Temple, Broad Street Station, Reading Terminal Station and the Union League have all been rated as models of architecture, as have many of the more elaborate residences in the fashionable quarters, all of which has worked to the common good of Philadelphia and Philadelphians.

The power and success of building in Philadelphia merit more than passing notice. There are two separate and distinct classes of builders in this city—the operative or house builders and the master or chief general contractors. The latter erect business houses and dwelling houses almost exclusively and always by contract. The former build hundreds and hundreds of dwelling houses and sell them direct to individuals on their own account—a method peculiar to Philadelphia. Both have well-appointed Exchanges, and both wield vast influence in all matters affecting their private interests or the welfare of the general public. Nearly all the big buildings erected hereabouts are built by subcontractors under the supervision of a general contractor and the architect who designed the edifice, which is another system peculiar to Philadelphia. The subcontractors furnish all the material they use and look to the general contractor for their pay.

The greatest industry connected with the building trade is the manufacture of bricks. Nearly 350,000,000 bricks, worth \$4,250,000, are manufactured in this city each year. The seventy brick yards in the city employ over 3500 people, and represent a

capital of \$4,000,000. Philadelphia pressed bricks are the best bricks in the markets of the world, and the Philadelphia brickmakers are conceded to be the best in the country. Bricks have been in constant and general use in this city since its primitive days. In 1705 brickmakers received 3s. 6d. per day, and bricks were sold for 22s. per thousand. To-day brickmakers are paid \$4.05 per day, and Philadelphia bricks find ready sale at \$21 per thousand.

The number of bricks used each year is enormous, and, remarkable as it may seem, Philadelphia uses less than half as many as New York, although twice as many buildings are erected here each year as in that city. The following table shows the number used in each of the twelve principal cities of the United States :

Philadelphia	422,000,000
New York	1,115,000,000
Chicago	453,000,000
St. Louis	211,000,000
Boston	170,000,000
Washington	130,000,000
Cincinnati	116,000,000
Cleveland	86,000,000
Pittsburg	82,000,090
Omaha	81,000,000
New Orleans	37,000,000
Indianapolis	36,000,000

Brickmaking has been one of the principal industries of Philadelphia for over a century. It was in this city, in 1840, that Nathaniel Adams attempted to operate the first brick machine ever built, and it was his machine that was smashed to kindling wood by a mob of Philadelphia brickmakers and their friends. The clay beds in this city are equal, if not superior, to any in the country, and they extend the entire length and breadth of the county. Murrell Dobbins, of this city, is the largest individual brick manufacturer in the country. He owns three large yards, with an annual output of 30,000,000 bricks. The Peerless Brick Company has a capacity of 22,000,000, most of which are the most costly grades of ornamental bricks, than which none finer or more

beautiful are made anywhere. Their display in the Exhibition Department of the Master Builders' Exchange is said to be the finest collection of ornamental bricks and the best specimen of the brickmaker's skill known to the trade.

The extent and importance of this industry cannot be well estimated, as there are no figures at hand showing the volume or diversity of the business.

Lime has been burnt and used by Philadelphians for over a century. Charles A. Cox & Son now operate the same quarries established by their ancestors over 150 years ago. Irvine & Cartt, J. Rex Allen, Walter T. Bradley, Budd & Co. and H. McInnes own and control the largest quarries and burn the largest proportion of the lime sold in this city. Great quantities of lime are shipped from this city to neighboring towns, but this branch of the trade is limited, as the bulk of the lime sold hereabouts is imported from the surrounding counties.

Tiles are used by the thousands in this city, but none are made here. For roofing purposes they have become almost a necessity for the higher-grade houses. They are used for flooring, wainscoting, and frequently for ceilings. For roofing they compete in the open market with the numerous metal devices now in use. The manufacture of metal roofing materials has become quite an industry, which has yet to reach perfection. Felt and other compositions for roofing are coming into general use, but are confined almost exclusively to warehouses, factories and temporary structures.

The market value of the 130 square miles of real estate within the corporate limits of Philadelphia is estimated at over \$1,000,000,000. The real-estate assessors have returned the total value for 1892 at \$732,300,892. This represents scarce two-thirds of the actual market value, as is best proved by the fact that not a single deed has been recorded for a decade conveying a foot of Philadelphia's realty at its assessed value. Instead, the records will show hundreds of instances where lots have been sold for quite or almost double the assessed valuation.

From the most accurate statistics available, there were 209,052 buildings in Philadelphia, December 31, 1890, for the accommoda-



tion of her 1,050,000 people; 121,000 of whom are land owners. New York has half as many buildings, 1,600,000 people and only 13,673 holders of realty. The full significance of these figures can only be appreciated when it is known that New York, Chicago and Boston together have but 65,000 more buildings than Philadelphia alone. From data furnished Postmaster Field by the authorities of the several cities named, Philadelphia has 12,328 more buildings than New York and Chicago together; 115,672 more than New York, 107,000 more than Chicago and 182,401 more than Boston. In this connection a tabulated statement furnished by the Census Bureau may be of interest:

	Number of Dwelling Houses.	Number of Families.
Ward 1	10,455	11,023
Ward 2	5,205	6,386
Ward 3	3,221	3,977
Ward 4	3,120	3,865
Ward 5	2,271	3,244
Ward 6	1,290	1,761
Ward 7	4,750	5,722
Ward 8	2,646	2,849
Ward 9	1,519	1,671
Ward 10	3,398	3,642
Ward 11	1,931	2,662
Ward 12	2,332	2,826
Ward 13	3,038	3,533
Ward 14	3,699	3,966
Ward 15	8,654	9,482
Ward 16	3,052	3,679
Ward 17	3,360	4,013
Ward 18	5,650	6,185
Ward 19	10,174	11,248
Ward 20	8,016	9,174
Ward 21	5,027	5,303
Ward 22	8,398	9,645
Ward 23	6,969	7,140

	Number of Dwelling Houses.	Number of Families.
Ward 24	7,563	8,281
Ward 25	6,551	7,276
Ward 26	11,688	12,205
Ward 27	5,222	5,474
Ward 28	9,010	9,456
Ward 29	9,530	10,462
Ward 30	5,517	5,993
Ward 31	6,380	6,551
Ward 32	5,968	6,156
Ward 33	6,347	6,668
Ward 34	4,191	4,341
 Total	 187,052	 205,766

In 1851 the assessed value of all Philadelphia was \$535,895,744; four years later it reached \$547,749,824, and the returns recently made by the assessors for 1862 place it at \$732,300,592, being a total increase of \$194,695,148 during eleven years, or \$176,153.014 per annum. That owners find ready sale for their holdings is shown by the number of conveyances effected each year. In 1859 properties were sold to the value of \$80,225,270.88. The transfers effected during 1860 amounted to \$82,770,165.22; and everything indicates that the total sales for 1861 will reach \$90,500,000, proving conclusively that confidence in the real-estate market of Philadelphia remains unshaken from year to year and is to-day stronger than ever.

A single instance of the wonderful growth of the city and the immense profits realized by the owners of her realty is well shown by the Twenty-eighth ward alone. In 1855 all the property in that ward was assessed at \$27,524,660. At that time the Twenty-eighth ward included all the land now incorporated in the Thirty-second ward. In 1851, when the ward had been divided, the portion remaining was assessed at \$27,371,785, and the Thirty-second ward was valued at \$22,659,475, an increase over the assessment of 1855 of \$22,446,590. Every ward in the city shows marked improvement in the same direction. The last report of the Board of Revision of Taxes appports the city as follows:

Ward.	Total Real Es- tate Taxable.
1	\$21,079,290
2	11,307,995
3	6,814,550
4	7,785,035
5	28,672,641
6	38,479,966
7	21,212,715
8	53,148,300
9	49,176,219
10	22,757,188
11	9,114,415
12	8,457,300
13	12,592,500
14	14,168,700
15	35,719,250
16	8,113,800
17	7,306,000
18	11,396,600
19	24,641,520
20	28,759,500
21	10,229,600
22	32,743,896
23	17,047,375
24	28,077,975
25	15,116,085
26	23,878,535
27	26,953,945
28	27,371,785
29	34,787,775
30	12,428,650
31	12,186,200
32	22,659,475
33	16,134,162
34	10,321,525
<hr/>	
Total	\$710,640,467

The scores of mammoth business house thoroughfares have added immensely to the business section. The railway, railroad arrangements now assured to Philadelphia cannot be valued.

No less than 12,274 building operations were of which number 7,296 were dwelling houses. In year, 1890, 11,896 operations were started, first eleven months of 1891 show that \$82 started at a proportionately greater cost during 1890. This gigantic industry is unique to a far greater extent than in any other city. The operations started during 1890 cost \$33,745,739 for 1890 and \$12,389,754 for 1891. This remarkable showing can be compared with other great cities, the leading figures for the year 1891:

Cities.	Buildings Erected.
Philadelphia	11,896
New York	6,722
Chicago	4,962
Brooklyn	4,356
Boston	4,456

When it is remembered that considerable new buildings erected in this city were of the nature of two stories high, the total cost of construction of 11,896 new buildings compares favorably with any of the other great cities named, more than half as many operations started

(Oct. 1, 1890, 1891). The Philadelphia Real Estate world, showing that real estate contractors had then in sight or under way an expenditure of \$27,000,000, exclusive since that time hundreds of new operations announced. It is, therefore, evident by Philadelphia's real-estate world in 1891 only maintained but augmented in the year

In his last message to City Councils Mayor Edwin H. Fitler dwelt at considerable length upon the building industry and the real-estate business of Philadelphia. He developed the fact that the builders of this city were annually improving 640 acres of land, or one square mile of territory, providing accommodations for 55,000 persons. He added importance to his facts by stating that the new buildings erected in this city each year would of themselves make a city equal in size to Camden, N. J., Hartford, Conn., Reading, Pa., Wilmington, Del., Toronto, Ont., or Charleston, S. C. He also called attention to the fact that the city owns real estate to the value of \$65,325,479, and has 1600 miles of streets and avenues within her boundaries, which is far in excess of any city in the world.

Few people outside of the city and the immediate vicinity appreciate the great variety of houses in this city and their general utility. This is partially due to the world-wide reputation Philadelphia has acquired for two-story brick-and-white-marble-step dwellings. From this has grown the impression that the thousands and thousands of houses hereabouts have naught to recommend them but white-marble steps. This is ridiculous. The dwellings described are numerous, and well they may be, as they include every conceivable device for the health and convenience of the occupants. That there are other kinds, and many of them, is well shown by one builder, who offers twenty-eight different styles, all of which were erected in the same neighborhood at about the same time. The great merit of the Philadelphia home is in its utility. The modest two-story house on a quiet street uptown, renting for \$12 per month, includes every necessary convenience to be found in the West Walnut street mansion renting for \$5000 a year. Best of all, there is a separate house for every family in the city, a feature distinctively Philadelphian; moreover, each of these houses has proper sanitary connections, gas and water, a bathtub, a cemented cellar, a sufficient yard and the dozen and one nooks, closets and cupboards so dear to the heart of every housewife.

The report of the Census Bureau for 1880, in speaking of Philadelphia, says: "The total length of the city is twenty-three miles, with an average width of five and one-half miles between the

rivers. Having thus a large stream to east and west, and fanned by strong currents of air, the situation of the city in point of healthfulness is most advantageous. It leads all other American cities in the accommodations provided for the poor man, and has thus earned the honorable title of 'The City of Homes.'

"The salubrity of Philadelphia is exceptional, the mortality being 1 to every 1000 persons less than that of London, 2 to every 1000 persons less than that of Paris, and 7 to every 1000 persons less than that of New York. This is due in part to the unbounded universal use for cleansing and

Philadelphia Record. {

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OF
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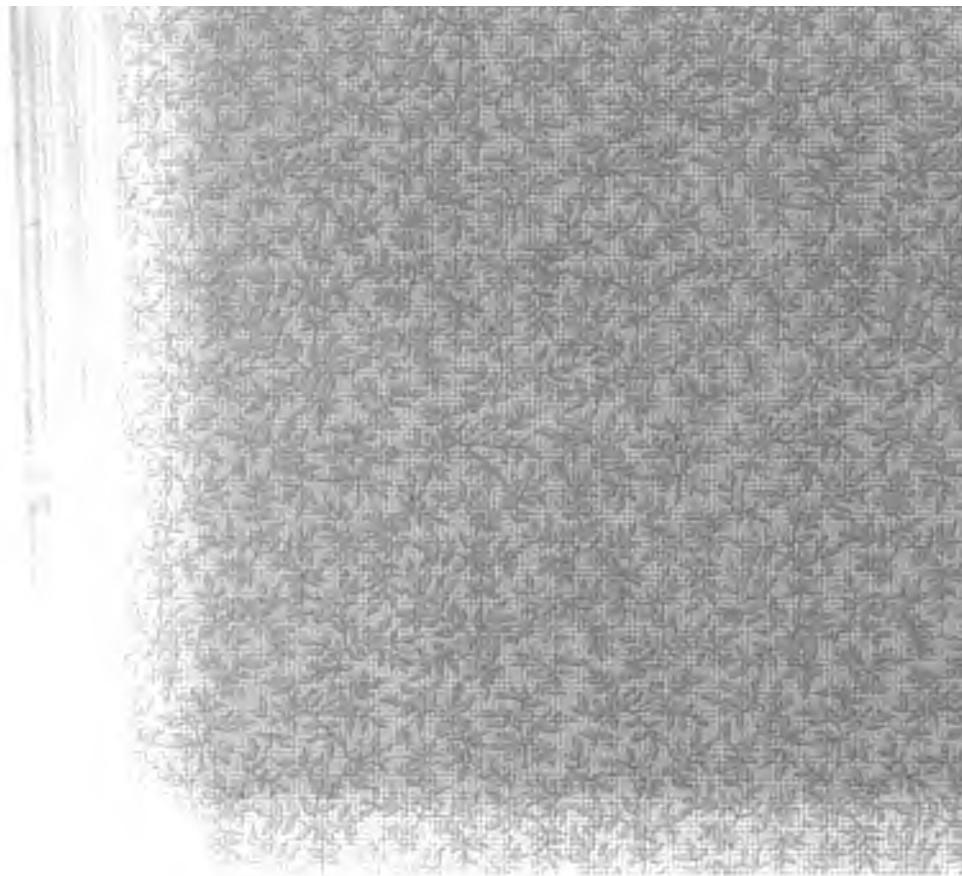
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